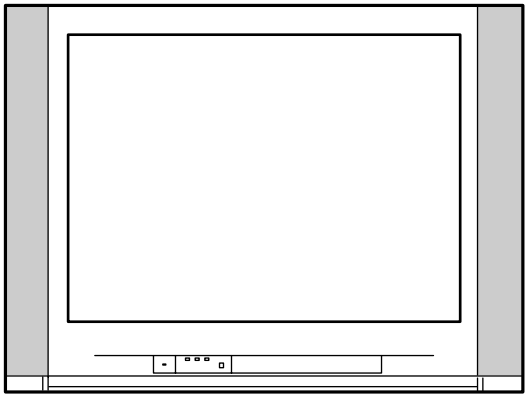
SHARP SERVICE MANUAL

SX9R7SX68JF10



COLOUR TELEVISION

Chassis No. SP-90

MODEL SX68JF100

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

FEATURES

- Multi 28 Systems
- Auto Search Tuning System
- 100 CH Program Memory
- NICAM (I,B/G), IGR (B/G) Stereo Sound
- High Contrast Picture (Black Stretch Circuit)
- CATV (Hyper Band) Ready (Used Frequency Synthesizer Tuner)
- Digital-Comb Filter (PAL/NTSC)
- 2 Mode Spatializer
- Arabic/Chinese/English/French/Malay/Russian 6 Language OSD
- On Timer/Sleep Timer/Reminder Timer
- Auto Picture Noise Reduction (TV)
- Blue Back Noise Mute
- Rear AV-In/Out Terminals
- Front AV-In Terminals
- Component Input Terminal
- 6-Cylinder SP BOX.
- Full Flat CRT

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WARNING

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis. To prevent electric shock, do not remove cover. No user – serviceable parts inside. Refer servicing to qualified service personnel.

SHARP CORPORATION

ELECTRICAL SPECIFICATIONS

Power Input	AC 220-240V, 50Hz (Auto)
Power Consumption	185W
Convergence	Self Convergence System
Focus	Bi-Potential, Uni-Potential Electroslatic
Sweep Deflection	Magnetic
Intermediate Frequency	
Picture IF Carrier	38.9 MHz
Sound IF Carrier	
6.5 MHz	32.4 MHz
6.0 MHz	32.9 MHz
5.5 MHz	33.4 MHz
4.5 MHz	34.4 MHz
Colour Sub-Carrier	
PAL/NTSC	34.47 MHz
SECAM	34.494/34.65 MHz
NTSC	35.32 MHz
Audio Power Output Rating	12W x 2 (Max)
Speaker	
Size	12 x 8 cm Elliptic x 2 pcs.
Voice Coil Impedance	6 ohm at 400Hz
Aerial Input Inpedance	75 ohm Unbalanced
Receiving Channels	
PAL-B/G, SECAM-B/G	
VHF	AU0 thru AU12 ch
	NZ1 thru NZ11 ch
	E2 thru E12 ch
UHF	E21 thru E69 ch
PAL-D/K, SECAM-D/K	
VHF	C1 thru C12 ch
	R1 thru R12 ch
UHF	C13 thru C57 ch
	R21 thru R69 ch
PAL-I	
VHF	B thru J ch
UHF	(H.K): 21 thru 69 ch
NTSC	
VHF	(US): 2 thru 13 ch
	(JAPAN): 1 thru 12 ch
UHF	(US): 14 thru 69 ch
	(JAPAN): 13 thru 62 ch
CATV	S1 thru S20 ch
	S21 thru S41 ch (Hyper)
Receiving Frequency	
VHF	44.25 thru 463.25 MHz
UHF	471.25 thru 863.25 MHz
Dimensions	Width: 722 mm
	Height: 568 mm
	Depth: 500 mm
	Weight (approx.): 47.5 kg
Cabinet Material	All Plastics

Specifications are subject to change without notice.

IMPOTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service peronnel only.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10k ohm Resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord should be disconnected from AC outlet.)

1. **Picture tube in this receiver employs integral implosion protection.**
2. **Replace with tube of the same type number for continued safety.**
3. **Do not lift picture tube by the neck.**
4. **Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.**

X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing many produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. **When repairing the circuit, be sure not to increase the high voltage to more than 34.0 kV (at beam 0μA) for the set.**
2. **To keep the set in a normal operation, be sure to make it function on 30.0 ± 1.5kV (at beam 1.8 mA) in the case of the set. The set has**
   ∴ been factory-Adjusted to the above mentioned high voltage.
   If there is a possibility that the high voltage fluctuates as a result of repairs, never forget to check for such high voltage after the work.
3. **Do not substitute a picture tube with unauthorized types and/or brands which may cause excess X-Ray radiation.**

BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety checks.

1. **Inspect all lead dress to make certain that the leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.**
2. **Inspect all protective devices such as non-metallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor- capacity networks, mechanical insulators etc.**

ADJUSTMENT PRECAUTION

The model is a mixture of the adjustment items of I²C BUS-CONTROL and the existing analog adjustment. Moreover, since the adjustment with I²C BUS-CONTROL is composed of the items which are set with the initial values (preset values) alone and the data variable items, refer to the following.

1) Setting method to the microprocessor service mode

① When the jumpers 351 and 352 of SET UP are short-circuited, enter into the service mode (I²C BUS CONTROL adjustment mode).
② The modes can be sequentially selected with the CH DOWN key of R/C.
③ The modes can be sequentially selected in the reversed order of ② with the CH UP key of R/C.
④ The data can be converted with the VOLUME UP/DOWN key of R/C.
⑤ When the short circuit between the jumpers 351 and 352 of the setup is cut off, it will be released from the service mode.

2) Initial value (preset value) setting

① When the MAIN POWER switch set at the service mode side is turned on, the initial value will be automatically set only on the new E²PROM (discriminated with the head 4 bytes).
② The initial data is set as shown in the attached sheets.
③ Take care that there are the items which need be changed and the items in which the initial values continue set.

SERVICE MODE

The service key selects the service mode. (Refer to the attached table.)
Select the item with CH UP/DOWN key, and change the data with VOL UP/DOWN key.
Moreover, in the service mode, the item can be directly selected by entering the following key.

Service item	R/C-CODE	Remarks
CUTOFF BKGD	CONTRAST-UP	
CUTOFF BKGD DVD	CONTRAST-UP	*1
V-AMP50	COLOUR-UP	
V-LINE50	COLOUR-DOWN	
V S-CORR50	BRIGHT-UP	
V-CENT50	BRIGHT-DOWN	
H-CENT50	TINT-UP	
H-SIZE50	TINT-DOWN	
E/W PAR	CONTRAST-DOWN	
E/W COR	SPA-DOWN	
TRAPE	BALLANCE-UP	
SCM BELL	SHARPNESS-UP	
SCM R-Y	SHARPNESS-DOWN	
SCM B-Y	TREBLE-UP	
SUB COL	SPATIALIZER-UP	
SUB COL DVD	SPATIALIZER-UP	*1
SUB TINT	BASS-DOWN	
SUB TINT DVD	BASS-DOWN	*1
SUB BRI	BASS-UP	
SUB BRI DVD	BASS-UP	*1
SUB CONT	TREBLE-DOWN	
SUB CONT DVD	TREBLE-DOWN	*1
SUB VOL	BALLANCE-DOWN	
V-AMP60	COLOUR-UP	*2
V-LINE60	COLOUR-DOWN	*2
V S-CORR60	BRIGHT-UP	*2
V-CENT60	BRIGHT-DOWN	*2
H-CENT60	TINT-UP	*2
H-SIZE60	TINT-DOWN	*2
PIP-HPOS	TUNE-UP	
PIP-SUB-TINT	TUNE-DOWN	
DUAL-PARA	FINE-UP	
MAIN-HCENT	FINE-DOWN	*2

Don't use mute key at CUT OFF/BKGD mode. Because BKGD data is initialized.
*1 To receive DVD, switch the key input.
*2 To receive the main 60Hz when inputting the key, switch it from 50Hz key.

• In the service mode, set the user data as shown below.

	USER DATA
CONTRAST	MAX(60/60)
COLOUR	CENT(0)
BRIGHTNESS	CENT(0)
TINT	CENT(0)
SHARPNESS	CENT(0)
S-VOLUME	MIN(0)
WHITE TEMP	CENT(0)
BLUE BACK	OFF
C SYSTEM	AUTO
S SYSTEM	*3
PICTURE NR	OFF
S-BOOSTER	OFF
TREBLE	CENT(0)
BASS	CENT(0)
SPATIALIZER	OFF
BALANCE	CENT(0)
SAVE	OFF

* 3 Setting system of each CH before switch to 1 service mode

Data at Address 00H thru 03H of E^{2}PROM are read during shift to the service mode.
If any data is different from the following, E^{2}PROM will be initializes as shown in the table.

00H : 55 01H : 88 02H : 32 03H : 13

Note : If you use new E^{2}PROM, it will be initialized. When you used new IC, it can work easily.

• Adjusting items

1. Service mode 1

No.	Initial value	Data range	OSD display	IC	Data setting	Initial value	Remarks
0	Blank		SERVICE MODE				
1	Cutoff adjustment		CUTOFF BKGD		*	*	*6
2	Cutoff adjustment (DVD)		CUTOFF BKGD		*	*	*7
3	Vertical size adjustment (50Hz)	0~127	V-AMP50	PDC	V-AMPLITUDE	97	*1
4	Vertical linearity adjustment (50Hz)	0~31	V-LINE50	PDC	V-LINEARITY	25	*1
5	Vertical S compensation adjustment (50Hz)	0~63	V S-CORR50	PDC	V-S.CORRECTION	44	*1
6	Vertical position adjustment (50Hz)	0~7	V-CENT50	VCD1	V-PHASE	7	*1
7	Horizontal position adjustment (50Hz)	0~31	H-CENT50	VCD1	H-PHASE	15	*1
8	Horizontal size adjustment (50Hz)	0~63	H-SIZE50	PDC	H-SIZE	38	*1
9	Parabola adjustment	0~63	E/W PAR	PDC	E-W PARABORA	28	
10	Corner adjustment	0~31	E/W COR	PDC	E-W CORNER	20	
11	Trapezoid adjustment	0~127	TRAPE	PDC	TRAPEZIUM	62	
12	SECAM BELL filter adjustment	0~255	SCM BELL	SECAM	BELL FILTER	124	
13	SECAM R-Y adjustment	0~15	R-Y	SECAM	R-Y	8	
14	SECAM B-Y adjustment	0~15	B-Y	SECAM	B-Y	8	
15	SUB-COLOUR sub adjustment	0~127	SUB COL	VCD1	COLOUR	40	
16	SUB-COLOUR sub adjustment (DVD)	0~127	SUB COL DVD	VCD1	COLOUR	40	
17	SUB-TINT adjustment	0~127	SUB TINT	VCD1	TINT	64	*5
18	SUB-TINT sub adjustment (DVD)	0~127	SUB TINT DVD	VCD1	BASEBAND-TINT	64	*5
19	SUB-BRIGHTNESS adjustment	0~255	SUB BRI	VCD1	BRIGHTNESS	140	
20	SUB-BRIGHTNESS adjustment (DVD)	0~255	SUB BRI DVD	VCD1	BRIGHTNESS	140	
21	SUB CONTRAST adjustment	0~31	SUB CONT	VCD1	SUB CONT	23	
22	SUB CONTRAST adjustment (DVD)	0~31	SUB CONT DVD	VCD1	SUB CONT	23	
23	SUB-SOUND volume adjustment	0~127	SUB VOL	DSP	VOLUME	127	
24	Vertical size adjustment (60Hz)	0~127	V-AMP60	PDC	V-AMPLITUDE	97	*8
25	Vertical linearity adjustment (60Hz)	0~31	V-LINE60	PDC	V-LINEARITY	25	*8
26	Vertical S compensation adjustment (60Hz)	0~63	V S-CORR60	PDC	V-S.CORRECTION	44	*8
27	Vertical position adjustment (60Hz)	0~7	V-CENT60	VCD1	V-PHASE	4	*3 *8
28	Horizontal position adjustment (60Hz)	0~31	H-CENT60	VCD1	H-PHASE	18	*8
29	Horizontal size adjustment (60Hz)	0~63	H-SIZE60	PDC	H-SIZE	38	*8
30	Vertical high voltage compensation	0~7	V-COM	PDC	V-COMPENSATION	6	
31	Horizontal high voltage compensation	0~7	H-COM	PDC	H-COMPENSATION	2	
32	Vertical position	0~3	V-BIAS	PDC	V-SFT	0	
33	Vertical compensation	0~15	V-"COR	PDC	V-" CORRECTION	10	
34	PIP display position (horizontal)	0~15	PIP-HPOS	PIP	BGH-FP	14	
35	PIP display position (vertical)	0~15	PIP-VPOS	PIP	BGV-FP	0	
36	PIP SUB-TINT adjustment	0~63	PIP-SUB-TINT	VCD2	TINT	32	
37	2-screen vertical size adjustment (50Hz)	0~127	DUAL-VSIZE50	PDC	V-AMPLITUDE	72	*4
38	2-screen horizontal size adjustment (50Hz)	0~63	DUAL-HSIZE50	PDC	H-SIZE	41	*4
39	2-screen vertical size adjustment (60Hz)	0~127	DUAL-VSIZE60	PDC	V-AMPLITUDE	72	*4
40	2-screen horizontal size adjustment (60Hz)	0~63	DUAL-HSIZE60	PDC	H-SIZE	41	*4
41	2-screen parabola adjustment	0~63	DUAL-PARA	PDC	E-W PARABOLA	18	*4
42	Main-screen horizontal adjustment (50Hz)	0~15	MAIN-HCENT50	PIP	MAH-FP	7	
43	Main-screen horizontal adjustment (60Hz)	0~15	MAIN-HCENT60	PIP	MAH-FP	7	
44	NVM mode	After adjustment, set another data except above at Address 00H thru 03H and turn on AC power, and the data will be initialized. Take care for this.					

[Remarks]

*1 When 50Hz data is set, the setting data is increased or decreased to set 60Hz data. (However, 50Hz data does not vary when 60Hz data is set.)

*2 Because of the fixed data, it is unnecessary to set the data unless otherwise specified.

*3 It is impossible to set (use) the data “6” and “7”. Use “0” thru “5”. Moreover, check whether “6” and “7” are used or not.

*4 When the data for the 1-screen mode is set, the set data is increased or decreased to set the data for the 2-screen mode.

Item	Offset value
2-screen vertical size (50Hz)	–25
2-screen horizontal size (50Hz)	+3
2-screen vertical size (60Hz)	–25
2-screen horizontal size (60Hz)	+3
2-screen parabola	–10

*5 It becomes "Y-Mute" in case of the SUB-TINT (TV & DVD) adjustment.

*6 CUTOFF BKGD

	Initial value
CUT-R	63
CUT-G	63
CUT-B	63
DRIVE-G	63
DRIVE-B	63

*7 CUTOFF BKGD DVD

	Initial value
CUT-R	63
CUT-G	63
CUT-B	63
DRIVE-G	63
DRIVE-B	63

*8 When 50Hz data is set, the set data is increased or decreased to set 60Hz data.

Item	Offset value
Vertical size	0
Verticality	0
Vertical S type compensation	0
Vertivcal position	–3
Horizontal position	+3
Horizontal size	0

INITIAL SETTING FOR CHANNEL SELECT DATA

1) Input in the service mode The channel select data is set into E2PROM with MCL key as shown below. After execution, select POS1 for the channel.

* CHANNEL PRESET data with MCL key input

Production point	SREC/SRAC/SYI/STTM				SREC/SCA(SKD)					JAPAN/NSEC			
R/C CODE	MCL1(R/C CODE 117h)				MCL2(R/C CODE 169h)				INTIAL 8	MCL3(R/C CODE 170h)			
TV-CH	CH-No.	Fv(MHz)	S-SYSTEM		CH-No.	Fv(MHz)	S-SYSTEM		SKIP	CH-No.	Fv(MHz)	S-SYSTEM	
1	E-2	48.25	5.5	B/G	AU-37	590.25	5.5	B/G	OFF	E-2	48.25	5.5	B/G
2	E-4/B-3	62.25	5.5	B/G	AU-0	46.25	5.5	B/G	ON	OI-2	59.25	6.5	D/K
3	OIR-3	77.25	6.5	D/K	AU-2	64.25	5.5	B/G	OFF	CA-3	65.75	6.5	D/K
4	E-5	175.25	5.5	B/G	AU-3	86.25	5.5	B/G	ON	OI-3	77.25	6.5	D/K
5	E-6/B-5	182.25	5.5	B/G	AU-4	95.25	5.5	B/G	ON	CA-5	85.25	6.5	D/K
6	OIR-7	183.25	6.5	D/K	AU-5A	138.25	5.5	B/G	ON	OI-5	93.25	6.5	D/K
7	OIR-8	191.25	6.5	D/K	AU-6	175.25	5.5	B/G	ON	E-5	175.25	5.5	B/G
8	E-8/B-7	196.25	5.5	B/G	AU-7	182.25	5.5	B/G	OFF	CA-8	184.25	6.5	D/K
9	J-9	199.25	4.5	M	AU-8	189.25	5.5	B/G	ON	OI-9	199.25	6.5	D/K
10	E-10/B-9	210.25	5.5	B/G	AU-9	196.25	5.5	B/G	OFF	E-10	210.25	5.5	B/G
11	E-12/B-11	224.25	5.5	B/G	AU-10	209.25	5.5	B/G	OFF	E-12	224.25	5.5	B/G
12	E-21	471.25	5.5	B/G	AU-11	216.25	5.5	B/G	ON	I-23	487.25	6.0	I
13	I-23	487.25	6.0	I	SKIP OFF FREE				ON	I-25	503.25	6.0	I
14	E-25	503.25	5.5	B/G	SKIP OFF FREE				ON	E-34	575.25	6.5	B/G
15	E-34	575.25	5.5	B/G	SKIP OFF FREE				ON	OI-42	639.25	6.5	D/K
16	E-35	583.25	5.5	B/G	SKIP OFF FREE				ON	OI-58	767.25	6.5	D/K
17	E-37	599.25	5.5	B/G	SKIP OFF FREE				ON	CHN/CA-53	831.25	6.5	D/K
18	J-38	621.25	4.5	M	SKIP OFF FREE				ON	I-69	855.25	6.0	I
19	OIR-42	639.25	6.5	D/K	SKIP OFF FREE				ON	JA-1	91.25	4.5	M
20	B-50	703.25	5.5	B/G	SKIP OFF FREE				ON	JA-2	97.25	4.5	M
21	I-54	735.25	6.0	I	SKIP OFF FREE				ON	JA-6	183.25	4.5	M
22	E-58	767.25	5.5	B/G	SKIP OFF FREE				ON	JA-8	193.25	4.5	M
23	E-64	815.25	5.5	B/G	SKIP OFF FREE				ON	JA-11	211.25	4.5	M
24	I-69	855.25	6.0	I	SKIP OFF FREE				ON	JA-12	217.25	4.5	M
25	E-69	855.25	5.5	B/G	SKIP OFF FREE				ON	JA-14	477.25	4.5	M
26	US-2	55.25	4.5	M	SKIP OFF FREE				ON	JA-50	693.25	4.5	M
27	A-6	83.25	4.5	M	SKIP OFF FREE				ON	WE-4	62.25	5.5	B/G
28	JA-6	183.25	4.5	M	AU-28	527.25	5.5	B/G	OFF	WE-25	503.25	5.5	B/G
29	JA-8	193.25	4.5	M	SKIP OFF FREE				ON	WE-28	527.25	5.5	B/G
30	JA-12	217.25	4.5	M	SKIP OFF FREE				ON	WE-37	599.25	5.5	B/G
31	US-14	471.25	4.5	M	SKIP OFF FREE				ON	JPN-38	621.25	4.5	M
32	JA-14	477.25	4.5	M	SKIP OFF FREE				ON	WE-64	815.25	5.5	B/G
33	JA-50	693.25	4.5	M	SKIP OFF FREE				ON	S-2	112.25	5.5	B/G
34	US-83	885.25	4.5	M	SKIP OFF FREE				ON	S-10	168.25	5.5	B/G
35	S-2	112.25	5.5	B/G	SKIP OFF FREE				ON	S-20	294.25	5.5	B/G
36	S-10	168.25	5.5	B/G	SKIP OFF FREE				ON	E-41	463.95	5.5	B/G
37	SKIP OFF FREE				AU-37	590.25	5.5	B/G	ON	E-5	174.95	5.5	B/G
38	S-20	294.25	5.5	B/G	SKIP OFF FREE				ON	E-5	175.55	5.5	B/G
39	S-41	463.25	5.5	B/G	SKIP OFF FREE				ON	SKIP OFF FREE			
40	SKIP OFF FREE				SKIP OFF FREE				ON	SKIP OFF FREE			
41	B-43	647.25	5.5	B/G	E-2	48.25	5.5	B/G	ON	SKIP OFF FREE			
42	B-45	663.25	5.5	B/G	E-4	62.25	5.5	B/G	ON	SKIP OFF FREE			
43	B-47	679.25	5.5	B/G	OIR-3	77.25	6.5	D/K	ON	SKIP OFF FREE			
44	E-5	174.95	5.5	B/G	E-5	175.25	5.5	B/G	ON	SKIP OFF FREE			
45	E-5	175.55	5.5	B/G	OIR-7	183.25	6.5	D/K	ON	SKIP OFF FREE			
46	SKIP OFF FREE				OIR-8	191.25	6.5	D/K	ON	SKIP OFF FREE			
47	SKIP OFF FREE				E-10	210.25	5.5	B/G	ON	SKIP OFF FREE			
48	SKIP OFF FREE				E-12	224.25	5.5	B/G	ON	SKIP OFF FREE			
49	SKIP OFF FREE				I-23	487.25	6.0	I	ON	SKIP OFF FREE			
50	SKIP OFF FREE				E-25	503.25	5.5	B/G	ON	SKIP OFF FREE			
51	SKIP OFF FREE				E-34	575.25	5.5	B/G	ON	SKIP OFF FREE			
52	SKIP OFF FREE				E-37	599.25	5.5	B/G	ON	SKIP OFF FREE			
53	SKIP OFF FREE				J-38	621.25	4.5	M	ON	SKIP OFF FREE			
54	SKIP OFF FREE				OIR-42	639.25	6.5	D/K	ON	SKIP OFF FREE			
55	SKIP OFF FREE				I-54	735.25	6.0	I	ON	SKIP OFF FREE			
56	SKIP OFF FREE				E-58	767.25	5.5	B/G	ON	SKIP OFF FREE			
57	SKIP OFF FREE				E-64	815.25	5.5	B/G	ON	SKIP OFF FREE			
58	SKIP OFF FREE				I-69	855.25	6.0	I	ON	SKIP OFF FREE			
59	SKIP OFF FREE				JA-1	91.25	4.5	M	ON	SKIP OFF FREE			
60	SKIP OFF FREE				JA-6	183.25	4.5	M	ON	SKIP OFF FREE			
61	SKIP OFF FREE				JA-8	193.25	4.5	M	ON	SKIP OFF FREE			
62	SKIP OFF FREE				JA-12	217.25	4.5	M	ON	SKIP OFF FREE			
63	SKIP OFF FREE				US-14	471.25	4.5	M	ON	SKIP OFF FREE			
64	SKIP OFF FREE				JA-50	693.25	4.5	M	ON	SKIP OFF FREE			
65	SKIP OFF FREE				S-2	112.25	5.5	B/G	ON	SKIP OFF FREE			
66	SKIP OFF FREE				S-10	168.25	5.5	B/G	ON	SKIP OFF FREE			
67	SKIP OFF FREE				S-20	294.25	5.5	B/G	ON	SKIP OFF FREE			
68	SKIP OFF FREE				S-41	463.25	5.5	B/G	ON	SKIP OFF FREE			
69	SKIP OFF FREE				E-5(Lo)	174.25	5.5	B/G	ON	SKIP OFF FREE			
70	SKIP OFF FREE				E-5(Hi)	175.25	5.5	B/G	ON	SKIP OFF FREE			
71	SKIP OFF FREE				SKIP OFF FREE				ON	SKIP OFF FREE			
99	SKIP OFF FREE				SKIP OFF FREE				ON	SKIP OFF FREE			

29A-FX SYSTEM INITIAL SETTING AT FACTORY

SKIP	Refer to MCL2 Channel select data. (Page 5-1)	
Image system	AUTO	(All POS)
NICAM forcible FM	OFF	(All POS)
NICAM DS	M1	(All POS)
NICAM ST	STEREO	(All POS)
NICAM MONO	MONO	(All POS)
IGR forcible FM	OFF	(All POS)
IGR ST	STEREO	(All POS)
IGR DS	MAIN	(All POS)
Last POWER	ON	
TV/AV	TV	
Last POS	2	
FB POS	2	
SAVE	OFF	
AUTOSELECT	ON	
BLUEBACK	OFF	
DIGIT	2 DIGIT	
H/P MODE	AUTO	
H/P VOL	30	
BALANCE	0 (Center)	
VOLUME	0	
ON-TIMER POS	Not set.	
ON-TIMER VOL	Not set.	
Entertainment	MOVIE	

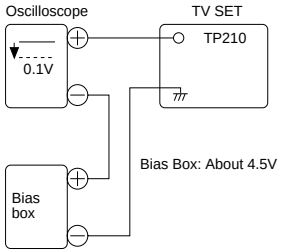
<AV menu : Entertainment>

Mode	STANDARD	MOVIE	MUSIC	NEWS
CONTRAST	50	60	45	45
COLOUR	0	+5	+5	0
BRIGHTNESS	0	0	+5	+5
TINT	0	0	0	0
SHARPNESS	0	0	0	0
WHITE-TEMP	0	+10 step to BLUE	0	0
YNR	OFF	OFF	ON [I]	OFF
S-BOOST	OFF	ON	OFF	ON
SPATIALIZER	OFF	ON [I] : +15	ON [I] : +10	OFF
TREBLE	0	+10	+12	0
BASS	0	+12	+5	0

<Factory setting and geomagnetic adjustment mode by model. (reference)>

Model name suffix	Earth magnetism		Background	X	Y
	V	H			
B (Hong Kong)	20,000	40,000	12,300°K	0.272	0.275
C (Singapore)	-10,000	40,000	12,300° K	0.272	0.275
G/F	30,000	20,000	12,300°K	0.272	0.275
G (Africa)	-10,000	40,000	12,300°K	0.272	0.275
X (Australia)	-50,000	20,000	12,300°K	0.272	0.275
H (Thailand)	10,000	40,000	12,300°K	0.272	0.275

SERVICE ADJUSTMENT
PIF CHECK ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	RF-AGC Cut-in adjustment (Already preset.)	① E-12CH (PAL colour Bar) is received. Electric field intensity: 54 ±1dBμV (75 Open) ② Connect the oscilloscope to TP210 as shown below.  ③ Drop the input electric field intensity to 51 ± 1dBμV (75Ω Open). ④ Under the conditions 1 and 3, TP210 voltage does not vary. Raise the input signal electric field strength to 60 ± 1dBμV (75Ω Open), and verify that it is 0.1V or more lower than TP210 of 1 and 3. ⑤ Set the signal at 63 to 67dBμV, and make sure there is no noise. ⑥ Set the signal at 90 to 95dBμV, and make sure that there is no cross modulation beat.	**Note:** If the impedance converter of 50/75 is not used at the **electric field intensity** meter of 50Ω system, set 52 ± 1dBV for 54 ± 1dBμV (75Ω Open). Moreover, take care for the loss if the converter is used. * If there is not any problem when the several lots of the model which employs the relevant tuner is checked, apply the check of only ⑤ and ⑥.

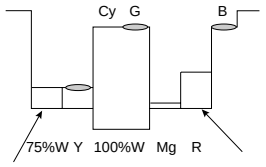
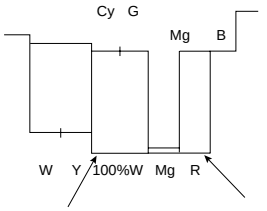
VIDEO LEVEL ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	VIDEO DET Level adjustment R220 (in the main unit)	① E-12CH B/G-PAL colour bar (100% white bar) is received. ② Adjust R220 to make the video output of the AV-OUT terminal become 1.0 ± 0.05Vp-p at the 75Ω terminator.	

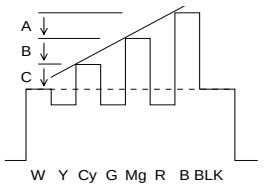
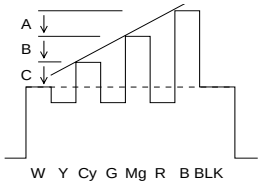
SERVICE ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Digital comb filter Y level adjustment R5467 (in the DID unit)	① Input PAL colour bar signal (100% white colour bar) of 1.0Vp-p at the 75Ω terminator from AV-IN terminal. (Input level 1.0 ± 0.05Vp-p) ② Connect the oscilloscope to YA (pin (7) of TP5462.) ③ Adjust R5467 to make the Y signal (100% white) of TP5462 become 2.0 ± 0.1Vp-p. * Verify that all are linearly amplified. (100% white area must not be collapsed.)	<Reference> When it is adjusted at E-12ch, take care for the voltage value. Adjustment value (TP5462) 2.0Vp-p

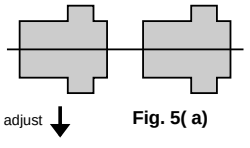
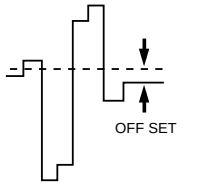
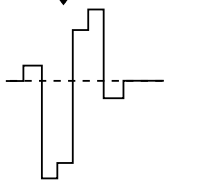
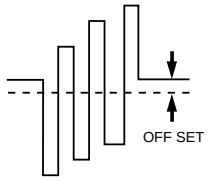
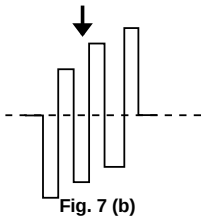
PAL CHROMA ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1-1	SUB-COLOUR (SUB COL) I²C bus adjustment (RF signal)	① E-12CH(PAL colour bar) is received. ② Make the picture normal with the remote controller. ③ Connect the oscilloscope to TP3802. (10:1 probe is used.) Range: 2V/Div. Sweep time : 20μsec/Div. ④ Set the "SUB COL" adjustment mode with the remote controller, and vary the sub colour data to make 75%W of the PAL colour bar and RED at the same level for adjustment shown in **Fig. 1**.	 **Fig. 1**
1-2	SUB-COLOUR (SUB COL DVD) I²C bus adjustment (DVD signal)	① DVD signal is received. (Half colour bar signal) ② Make the picture normal with the remote controller. ③ Connect the oscilloscope to TP3802. (10:1 probe is used.) Range : 2VA/Div. Sweep time: 20μsec/Div. ④ Set the "SUB COL DVD" adjustment mode with the remote controller, and vary the sub colour data to make 100%W of the colour bar and RED at the same level for adjustment shown in **Fig. 2**.	 **Fig. 2**

NTSC CHROMA ADJUSATMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1-1	SUB-TINT (SUB TINT) I²C bus adjustment (RF signal)	① Select the "SUB-TINT" adjustment mode (automatic Y cut) to receive JA-8CH(NTSC colour bar). ② Connect the oscilloscope to TP3803 (B-out). Range : 50mV/Div. (AC) Sweep time: 10μsec/Div. (10:1 probe is used.) ③ Vary the sub tint data to adjust the waveform to be gained as shown in **Fig. 3**. TP3803……(KY) 6 pin	 **Fig. 3** A=B=C
1-2	SUB-TINT (SUB TINT DVD) I²C bus adjustment (DVD signal)	① Select the "SUB-TINT DVD" adjustment mode (automatic Y cut) to receive the DVD colour bar signal. ② Connect the oscilloscope to TP3803. Range : 50mV/Div. (AC) Sweep time: 10μsec/Div. (10:1 probe is used.). ③ Vary the sub tint data to adjust the waveform to be gained as shown in **Fig. 4**. ④ Release the adjustment mode.	 **Fig. 4** A=B=C

SECAM CHROMA ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	BELL FILTER f0 (SCM BELL) I²C bus adjustment	① Receive Oi-5CH(SECAM colour bar). ② Select the "SCM BELL" fo adjustment mode. ③ Connect the oscilloscope to TP901 of main. (TP2901 in VCJ unit) Range : 10mV/Div. (AC) Sweep time: 20µsec/Div. (10:1 probe is used.) ④ Vary the bell filter data to align the waveform to be the nearest to that in **Fig. 5 (b)**. (Arrange the level to gain the whole balance.)	 **Fig. 5(a)** **Fig. 5 (b)** * To be at the same levbel.
2	SECAM black level R-Y/B-Y (R-Y and B-Y) I²C bus adjustment	① Receive Oi-5CH(SECAM colour bar). ② Select SECAM black level adjustment "R-Y" mode. ③ Connect the oscilloscope to TP802 (TP2804 in VCJ unit) of the main. Range: 10mV/Div. Sweep time: 20µsec/Div. (10:1 probe is used.) ④ Vary R-Y data to minimize the offset between the non-signal line and signal line as shown in **Fig. 6 (b)**. ⑤ Select SECAM black label adjustment "B-Y" mode. ⑥ Reconnect the oscilloscope to TP803 (TP2805 in VCJ unit) of the main. The conditions are the same as in Item (3). ⑦ Vary B-Y data to minimize the offset between the non-signal line and signal line as shown in **Fig. 7 (b)**.	 **Fig. 6 (a)**  **Fig. 6 (b)**  **Fig. 7 (a)**  **Fig. 7 (b)**

SOUND LEVEL ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	SUB SOUND (SUB VOL) (I²C bus adjustment)	① Receive E-12ch (PAL colour bar). Signal content: 400Hz 100% Mod. ② Connect the probe of the meter to (SI) connector. (See **Note**) ③ Select "SUB VOL" in the service mode. ④ Adjust the sub-sound data to make the meter indicate 8.5Vrms (at L-ch). Adjustment value : 8.5 ± 0.4Vrms	**Note:** * SPATIALIZER ..... OFF * S-Normal state * S-VOL ..... Max * S-BOOSTER ..... OFF
2	Noise mute check	① Receive E-12CH (PAL colour bar). ② Maximize the sound volume to verify that the sound is output from the speaker. Then, set the non-signal state. ③ At this time, verify that the audio mute operates. ④ After checking the operation, set the sound volume to be the minimum.	

SIF (NICAM/IGR) ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	VCO COIL T2300 (in the NICAM unit)	① Receive E-69CH (PAL colour bar). (Set the receiving frequency at AFT OFF Ex. E-69=855.25 MHz.) ② Connect the digital voltmeter to TP301 (in the main unit). ③ Verify that it is turned counterclockwise to 0V and clockwise to 5V, and adjust T2300 to make the DC voltage of TP2300 become 2.5 ± 0.1V in the range. <Single-unit adjustment> - For your Reference. Vcc 5 ± 0.1V IF input frequency 38.9MHz ± 10kHz Control it under these conditions. Adjust T2300 to make the DC voltage of TP2300 (in the NICAM unit) become 2.5 ± 0.1V. After single-unit adjustment, check the practical setup. Align the receiving frequency to the select channel frequency. (AFT OFF) The checked TP301 in the main unit voltage must be 2.5 ± 1.0V. (Take care that ±1.0 is considered for the Vcc difference between the single unit and unit, Fo difference and so on, but is not the adjustment precision.)	

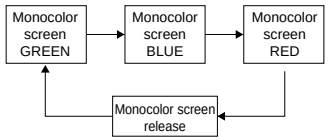
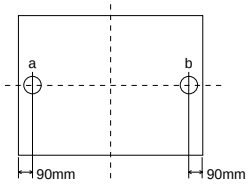
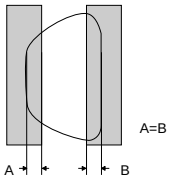
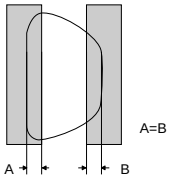
CUT OFF, BKGD ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	CRT CUT OFF (CUT OFF BKGD) Service mode I^2C bus data adjustment	① Receive E-5CH (Monoscope pattern). ② Set P-NORM with the remote controller. ③ Turn on the service SW, and select the "CUT OFF BKGD" mode. ④ Set the screen VR to 0/10. ⑤ Press "⋈" key of the remote controller to select the horizontal centering mode. ⑨ Turn the screen VR clockwise, and adjust the first lighting horizontal centering raster to slightly light. ⑩ Adjust the CUT OFF data of two other colours, and coarsely adjust the horizontal centering to become white. (**Note**) ⑪ Turn the screen VR in the opposite direction to the point where the horizontal centering raster goes out. **Note:** Apply the adjustment after aging with the beam current 1,500 ± 50µA or more for 30 minutes or more (On the monocolour screen of white or green) ⑫ Press "-/--" key of the remote controller to select the normal mode.	**Note:** R CUT OFF UP "1" KEY DOWN "4" KEY G CUT OFF UP "2" KEY DOWN "5" KEY B CUT OFF UP "3" KEY DOWN "6" KEY Data up/down is possible with the above comparison.
2-1	White balance background (CUT OFF BKGD) I^2C bus adjustment (RF Signal)	① E-5CH (Monoscope pattern) is received. ② Set P-NOM with the remote controller. ③ Connect the beam ammeter between TP1601 and TP1602. ④ Coarsely adjust the beam current to approx. 1.8 mA with R1633 (sub-contrast VR). ⑤ Receive the window pattern with AV input. (PAL burst is generated with the signal generator.) Select "CUT OFF BKGD mode". ⑥ With the data of G-drive and B-drive, adjust the colour temperature 12,300°K of the white peak to white. ⑦ Adjust the right dark area of the window to 12,300°K with R-cut off, G-cut off and B-cut off. ⑧ Readjust the colour temperature at the white peak. ⑨ Check 12,300°K at the low white. **Note:** Apply this adjustment after aging with the beam current 1,500 ± 50µA or more for 30 minutes or more. (On the white or green monocolour screen) * The colour temperature is based on the shipment initial setting table.	* 12300 °K X : 0.272 Y : 0.275 (With Minolta colour analyzer CA-100) **Note:** G-DRIVE UP "7" KEY DOWN "⇄" KEY B-DRIVE UP "8" KEY DOWN "0" KEY Data up/down is possible with the above comparison. * Apply R/G/B-CUT and B/G-DRIVE after verifying that they are at the initial values.
2-2	White balance background (CUT OFF DVD BKGD) I^2C BUS adjustment (DVD signal)	① The window pattern is received with DVD signal (component signal). ② Apply the adjustment in the same step as 2-1⑤ and subsequence above. (12,300°K) (G-DRIVE, B-DRIVE, R-CUTOFF, G-CUTOFF and B-CUTOFF) Apply the adjustment after the end of 2-1.	**Note:** Use the window pattern of the signal generator for adjustment.

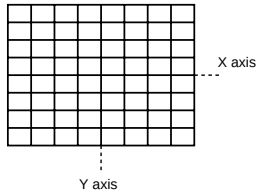
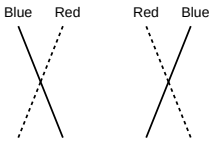
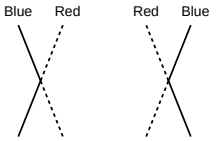
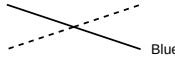
SUB CONT SUB-BRIGHT ADJUSTMENT

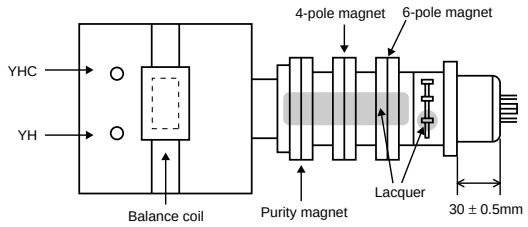
NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
3	MAX BEAM R1633 (in the power unit)	① Receive E-5CH (Monoscope pattern) with standard mode. ② Make the image normal with the remote controller. ③ Connect the beam ammeter between TP1601 and TP1602. Ammeter full scale: 3mA range TP1602 is connected at the - side of the ammeter. TP1601 is connected at the + side of the ammeter. ④ Adjust the beam current to 1.8mA ± 20µA with R1633 (sub-contrast VR). **Note:** Apply the adjustment after aging with the beam current 1,500 ± 50µA or more for 30 minutes or more. (On the white or green monocolour screen.)	
4-1	Sub-contrast (SUB CONT.) I^2C bus adjustment (RF signal)	① Receive the window pattern with AV input. ② Make the picture normal with the remote controller. ③ Select the "SUB-CONTRAST" adjustment mode with the remote controller, and adjust 50% white to 150 ± 5cd.	**Note:** Use "Y" of Minolta colour analyzer CA-100. **Note:** Us the PAL window pattern of the signal generator for adjustment. (PAL and colour burst are provided.)
4-2	Sub-contrast (SUB CONT. DVD) I^2C bus adjustment (DVD signal)	① Select the DVD mode. ② Receive the signal of the DVD signal generator. (Component signal) (Window pattern) ③ Make the picture normal with the remote controller. ④ Select the "SUB-CONTRAST" adjustment mode (DVD) with the remote controller, and adjust 50% white to 150 ± 5cd.	
5-1	Sub-bright (SUB BRI) I^2C bus adjustment (RF signal)	① Receive the window pattern with AV input. ② Make the picture normal with the remote controller. ③ Select the "SUB-BRIGHT" adjustment mode with the remote controller, and adjust the right dark white area of the window pattern to 2.7 ± 0.3cd.	Reference * When E-2CH (Crosshatch pattern) or equivalent signal is received, ① Make the picture normal with the remote controller. ② Adjust the 3rd (1 thru 5 from the left) black of the window pattern to sink. CUTOFF POINT
5-2	Sub-bright (SUB BRI DVD) I^2C bus adjustment (DVD signal)	① Select the DVD mode. ② Receive the signal of the DVD signal generator. (Component signal) (Window pattern) ③ Make the picture normal with the remote controller. ④ Select the "SUB-BRIGHT" adjustment mode (DVD), and adjust the right dark white area of the window pattern to 2.7 ± 0.3cd of the window pattern.	

PURITY ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Purity adjustment	① Select the green monocolour screen with the remote controller, and set the beam current of 1.4 mA with the contrast control. ② Sufficiently degauss CRT with the degausing coil. **Note:** For the adjustable magnetic field, refer to the job instruction sheet. The adjustable magnetic field is as shown page 5. ③ The purity magnet must be previously set at the 0 magnetic field, and the convergence must be adjusted to be rough. With P-MG, adjust it to the center - rank A. ④ Observing the points a and b of **Fig. 8-1** with the microscope, move DY fore and aft to set the landing at Rank A. If the a/b balance is poor, compensate it to the center "Rank AB". ⑤ Align it to zero, keeping the raster rotation in the east direction. ⑥ Tighten the deflection coil fastening screws. Tightening torque: 108 ± 20N (11 ± 2 kgf) ⑦ Checking the CRT corner area, bond the magnetic sheet to set the landing at Rank A for compensation. **Note:** Apply the adjustment after aging with the beam current 1,500 ± 50µA or more for 30 minutes or more. **Note:** Select the service mode, and press the monocolour key of R/C for process, and the monocolour screen (green) will be selected. * Every push of the monocolour key changes the screen as follows. 	 **Fig. 8-1**  **Fig. 8-2: Rank A CRT**  **Fig. 8-3: Rank A CRT** * Continuously press the monocolour key 1 second or more, and the monocolour mode will be selected without the service mode. Even with TEXT key or "R. G. Cy" key, it can be directly switched to each monocolour screen.
2	Peripheral purity adjustment	① After YPB adjustment of DY, receive the crosshatch, and coarsely adjust Yh and Yv by swinging DY. (Fix it with the wedge within 30 seconds.) ② In the monocolour screen (green), set the beam current at 1,400µA. ③ In Bh=0 and Bv= Refer to the factory setting and geomagnetic adjustment by model (ref.), verify that the landing in the corner area is practically at the rank A. If it is deviated, bond the Pu compensation Mg for adjustment.	**Note:** Set to natural magnetic field.

CONVERGENCE ADJUSTMENT

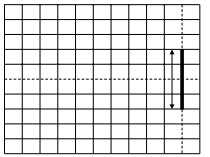
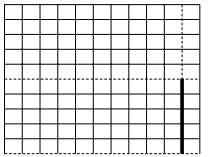
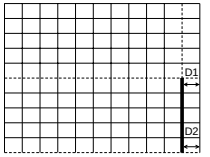
NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Convergence adjustment (Apply this after purity adjustment.)	① Receive E-2CH (Crosshatch pattern). ② With the remote controller, make it normal. (Static convergence adjustment) ① Overlap blue and red with the open-/closing angle and rotation of the 4-pole magnet. ② Overlap green on blue and red with the open-/closing angle and rotation of the 6-pole magnet. (Dynamic Convergence Adjustment) ① Tilt the deflection yoke in all directions until the vertical and horizontal lines become distortion-free and straight on the screen. Fix the wedges in this position. ② Using the YH and YHC controls on the deflection yoke, adjust the red and blue vertical lines along the Y axis at the screen center. (See **Figs. 9-1 and 9-2**.) ③ If the red and blue horizontal lines (XV) along the X axis at the screen center are out of position, turn the balance coil on the deflection yoke to adjust the red and blue lines (XV). (See **Fig. 9-3**.) ④ Looking all over the screen to make sure there is no problem. Apply glass tape to the wedges and apply lacquer to the deflection yoke lock screws, magnet unit (purity, 4-pole and 6-pole magnets), and magnet unit lock screws.	  **Fig. 9-1 Adjust with YHC control.**  **Fig. 9-2 Adjust with YH control.**  **Fig. 9-3 Adjust with balance coil.**



FOCUS ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Dynamic focus adjustment L1680 (in the power unit)	① Receive E-5CH (Monoscope Pattern). ② With the remote controller, make it normal. ③ Connect the synchroscope to the eight pins of T1680. ④ Turning L1680, adjust the amplitude of the horizontal frequency waveform to 600Vp-p. 	
2	Focus adjustment FBT FOCUS-VR (in the power unit)	① Receive E-5CH (Monoscope Pattern). ② With the remote controller, make the image normal. ③ Adjust the focus VR-1 to make the horizontal line around character “325” at left-top position as fine as possible. ④ Adjust the focus VR-2 to make the vertical line around character “325” at left-top position as fine as possible. ⑤ Repeat Items 3 and 4 once again, adjust the focus.	

HORIZONTAL/VERTICAL CIRCUIT ADJUSTMENT

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Main screen adjustment		
	V-AMP50	Adjust the overscan to 8.5%. (E-5)	
	V-LINE50	Adjust the linearity to the best.	The receiving channel in ( ) are the following signals. (E-2): Crosshatch (50Hz) (E-5): Monoscope (50Hz)
	V-S-CORR50	Already preset. (Adjust this unless the linearity is achieved.)	
	V-CENT50	Align the center of the screen to the geometric center of CRT. (E-5)	
	H-CENT50	Align the center of the screen to the geometric center of CRT. (E-5)	
	H-SIZE50	Adjust the overscan to 8.5%. (E-5)	
	E/W-PAR	Look at the first vertical line from the right end of the crosshatch pattern. Adjust the data so that the four cells just on the left of this vertical line be straight down. (**Fig. 10**) (E-2)	 **Fig. 10**
	EW-COR	Look at the first vertical line from the right end of the crosshatch pattern. Adjust the data so that the lower half of this vertical line be straight down. (**Fig. 11**) (E-2)	 **Fig. 11**
	TRAPE	Look at the first vertical line from the right end of the crosshatch pattern. Adjust the data so that the distance D1 (between the first line's center and the screen edge) and the distance D2 (between the first line's bottom and the screen edge) be the same. (**Fig. 12**) (E-2)	 **Fig. 12**
	V-COM	Already preset. (Adjust if the quality is specially poor.)	
	H-COM	Already preset. (Adjust if the quality is specially poor.)	
	V-BIAS	Already preset. (Adjust if the quality is specially poor.)	
	V- COR	Already preset. (Adjust if the quality is specially poor.)	
	OTHER	On the items of V-AMP60, V-LINE60, V S-CORR60, V-CENT60, H-CENT60 and H-SIZE60, the compensation data is automatically input if the 50Hz mode adjustment is done.	However, if it is largely deviated when it is checked in the 60Hz mode, readjust it in the 60Hz mode.
	I^2C BUS adjustment		

A/V INPUT/OUTPUT CHECK

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	Video output check Audio output check	① Receive E-12CH colour bar (colour bar audio 400Hz 100% MOD of 100% white). ② The video output must be within the specified range of 1.0Vp-p ± 3dB at the 75 ter minator. ③ The audio output must be within the specified range of 1.76Vp-p ± 3dB at the 10k ter minator.	
2	Video input check Audio input check S-terminal input check	① The mode must be switched in the cycle of TV → AV1 → AV2 → AV3 → DVD → TV with TV/AV key of R/C, and the picture and sound which correspond to each input/output terminals must be properly output. * Here, DVD is applied for the input alone. ② When the connector is inserted into the S-video input terminal on AV1, it must be switched from AV to S-video and must be properly operated. Moreover, check "AV1-S" of OSD. ③ When the connector is inserted into the S-video input terminal on AV3, it must be switched from AV to S-video and must be properly operated. Moreover, check "AV3-S" of OSD.	
3	AV3 automatic discrimination check	① Receive TV with R/C. ② When the signal is input to the video input terminal of AV3, it is automatically switched to AV3. ③ When the signal is input to the S-video input terminal of AV3, it is automatically switched to AV3-S. * Setting: Auto select in the feature menu — ON	

FUNCTION OPERATION CHECK (1) (VIDEO AND AUDIO)

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	CONTRAST	① Receive E-5CH. ② Select CONTRAST by picture menu. ③ The contrast must be varied with UP/DOWN.	
2	COLOUR	① Receive J-13CH. ② Select COLOUR by picture menu. ③ The colouring must be varied with UP/DOWN. (Any colour must not remain in MIN.)	
3	BRIGHTNESS	① Receive E-5CH. ② Select BRIGHT by picture menu. ③ The black level must be varied with UP/DOWN.	
4	TINT	① Receive J-13CH. (NTSC colour bar) ② Select TINT by picture menu. ③ With UP/DOWN, the tint must be varied toward green for UP, and toward red for DOWN.	
5	NORMAL	① If NORMAL key is pressed when the mode is displayed in P/S-mode, the displayed content alone must be set to be normal. (At standard mode.) CONTRAST : 50 COLOUR : CENTER BRIGHTNESS : CENTER TINT : CENTER SHARPNESS : CENTER	* If it is not displayed, CONTRAST, COLOUR, BRIGHT, TINT and SHARPNESS must be all set to be normal.
6	SHARPNESS	① Receive E-5CH. ② Select SHARPNESS by picture mode. ① The screen quality must be varied with UP/DOWN.	
7	CH sign display colour	① All CH (0 thru 99) sign must be displayed in green.	* If the TV is factory setting.
8	TREBLE	① Receive E-5CH. ② Select TREBLE by sound menu. ③ The high band must be varied with UP/DOWN.	
9	BASS	① Receive E-5CH. ② Select BASS by sound menu. ③ The low band must be varied with UP/DOWN.	
10	BALANCE	① Receive E-5CH. ② Select BALANCE by sound menu. ③ Verify that the left/right balance must be varied with UP/DOWN.	

FUNCTION OPERATION CHECK (2) (VIDEO AND AUDIO)

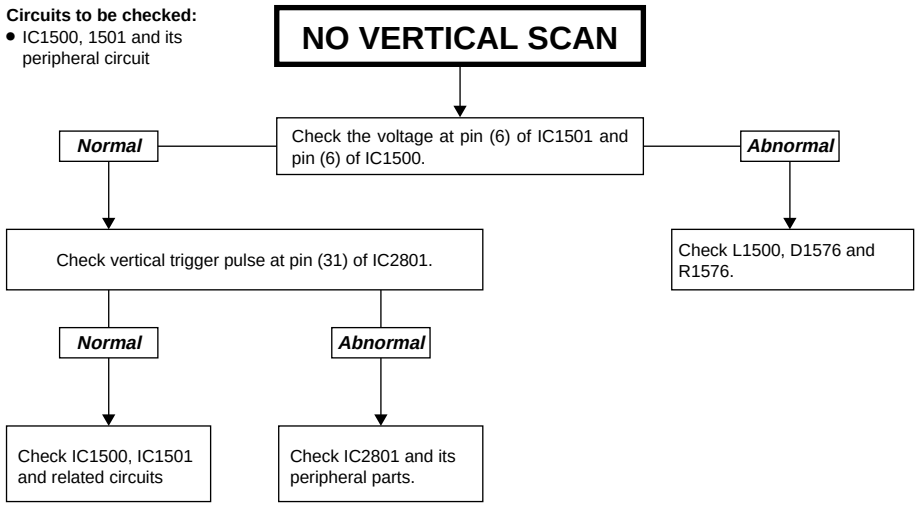
NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
11	COLOUR SYSTEM	① When E-12CH PAL COLOUR BAR is received and another mode except PAL or AUTO is selected in the colour system, Verify that the colour must not be properly operated. ② When E-10CH SECAM COLOUR BAR is received and another mode except SECAM or AUTO is selected in the colour system, Verify that the colour must not be properly operated. ③ When E-37CH NTSC 4.43 COLOUR BAR is received and another mode except N4.43 or AUTO is selected in the colour system, Verify that the colour must not be properly operated.with UP/DOWN. ④ When JA-8CH NTSC 3.58 COLOUR BAR is received and another mode except N3.58 or AUTO is selected in the colour system, Verify that the colour must not be properly operated.	**Note:** Take care that the colour and sound must not be properly operated with the special signal E-4, E-37, J-38 and E-64 in the auto mode.(Check it in the forcible mode.)
12	SOUND SYSTEM	① When OI-9CH PAL COLOUR BAR is received and M, B/G, I is selected in the sound system, Verify that the sound must not be properly output. ② When E-23CH monoscope is received and M, B/G, D/K is selected in the sound system, Verify that the sound must not be properly output. ③ When E-12CH colour bar is received and M, I, D/K is selected in the sound system, Verify that the sound must not be properly output. ④ When JA-8CH colour bar is received and B/G, I, D/K is selected in the sound system, Verify that the sound must not be properly output.	**Note:** Take care that 5.5M of 1 and 6.5M of 3 are slight in the variation.
13	SPATIALIZER Key	① Receive E-5CH music broadcast. ② The sound mode must be switched with SPATIALIZER key (R/C) as follows. SPATIALIZER OFF ↓ SPATIALIZER 1 ↓ SPATIALIZER 2 ↓ ③ Verify that the sound from the speaker in the MONO mode is felt to be wide.	R/C key or MENE screen
14	S-BOOSTER	① Receive E-5CH music broadcast. ② Select S-BOOSTER in S-mode. ③ The high/low bands must be varied with ON/OFF. (The high/low bands must be raised with ON.)	

PROTECTOR OPERATION CHECK

NO.	Adjustment part	Adjusting procedure and conditions	Waveform and others
1	H, V protector	① Receive E-5CH (monoscope pattern). ② Connect the bias box to the cathode side (R1662 side) of D1621. ③ Set the voltage of the bias box at 15V, and verify that the protector does not operate. ④ Set the voltage of the bias box at 24V, and verify that the protector operates.	Reference Approx. 17.7 V as ordinary
2	Other protectors	① Correspondence for short circuit of smoothening electrolysis of +B line and so on To check the operation of the protector and so on, take care for the breakage, deterioration and so on of each element.	

TROUBLE SHOOTING TABLE

Circuits to be checked:
- IC1500, 1501 and its peripheral circuit

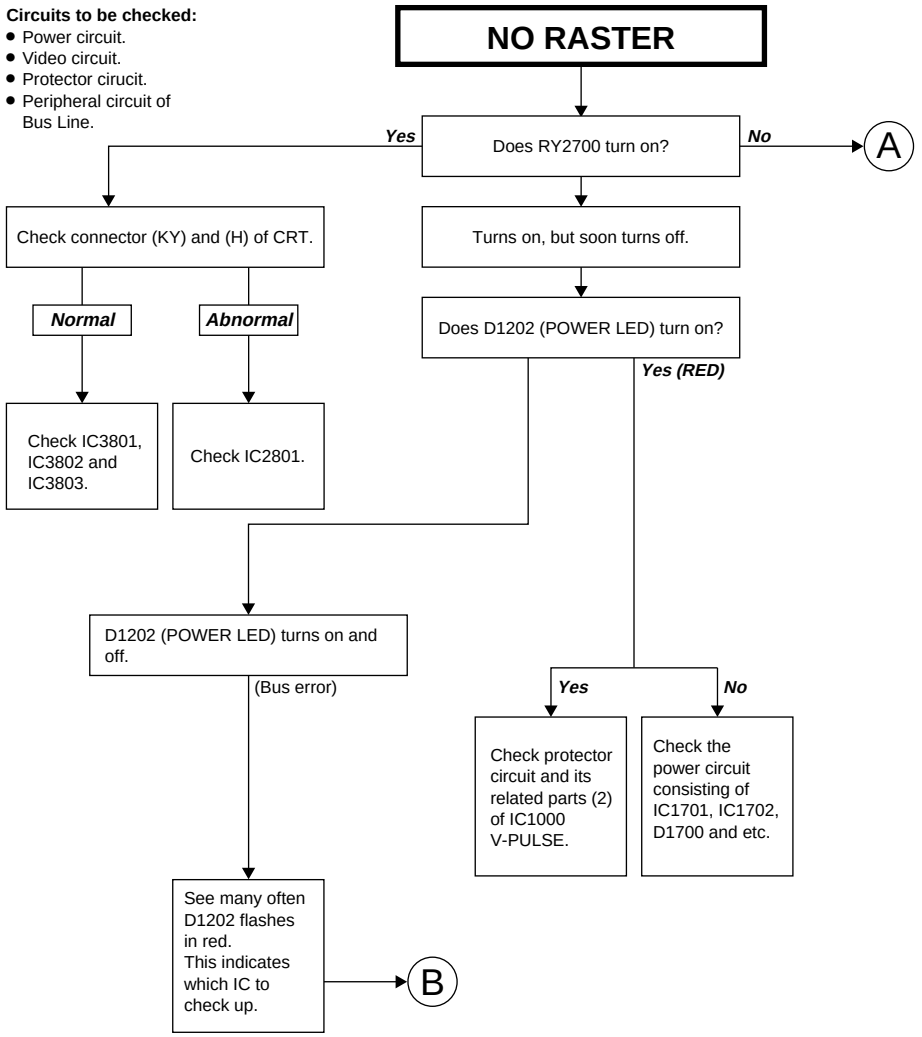

NO VERTICAL SCAN
Check the voltage at pin (6) of IC1501 and pin (6) of IC1500.
Normal
Abnormal
Check vertical trigger pulse at pin (31) of IC2801.
Check L1500, D1576 and R1576.
Normal
Abnormal
Check IC1500, IC1501 and related circuits
Check IC2801 and its peripheral parts.

Note 1: Make sure that not for the horizontal centering mode. Turn on the service mode. (Short J351 and J352.) Then when you press "- / --" key on the remote you can get in the horizontal centering mode.

Note 2: The vertical sync signal must be fed to pin (2) of IC1000 in oder not to activate the vertical no-scan protector. Take this measure with the protector circuit for the troubleshooting on the following pages.

TROUBLE SHOOTING TABLE (Continued)

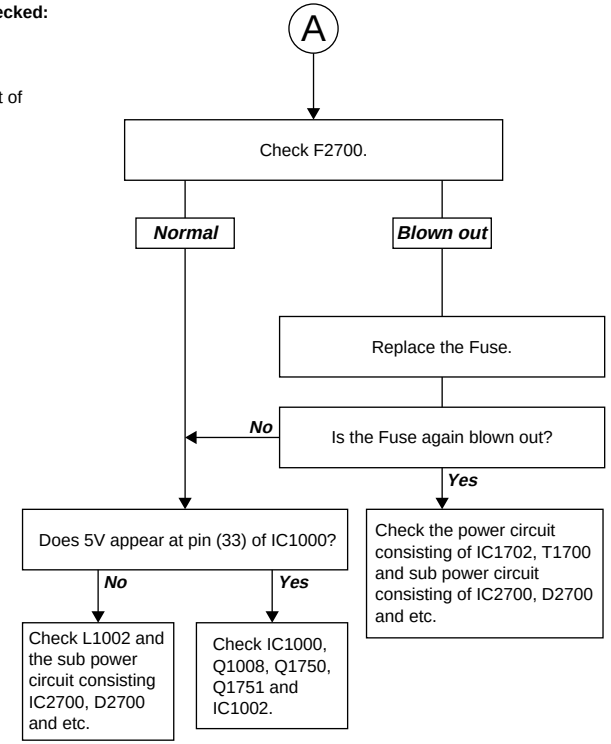
Circuits to be checked:
- Power circuit.
- Video circuit.
- Protector cirucit.
- Peripheral circuit of Bus Line.


NO RASTER
Does RY2700 turn on?
Yes
No
A
Check connector (KY) and (H) of CRT.
Turns on, but soon turns off.
Normal
Abnormal
Does D1202 (POWER LED) turn on?
Yes (RED)
Check IC3801, IC3802 and IC3803.
Check IC2801.
D1202 (POWER LED) turns on and off.
(Bus error)
Yes
No
Check protector circuit and its related parts (2) of IC1000 V-PULSE.
Check the power circuit consisting of IC1701, IC1702, D1700 and etc.
See many often D1202 flashes in red. This indicates which IC to check up.
B

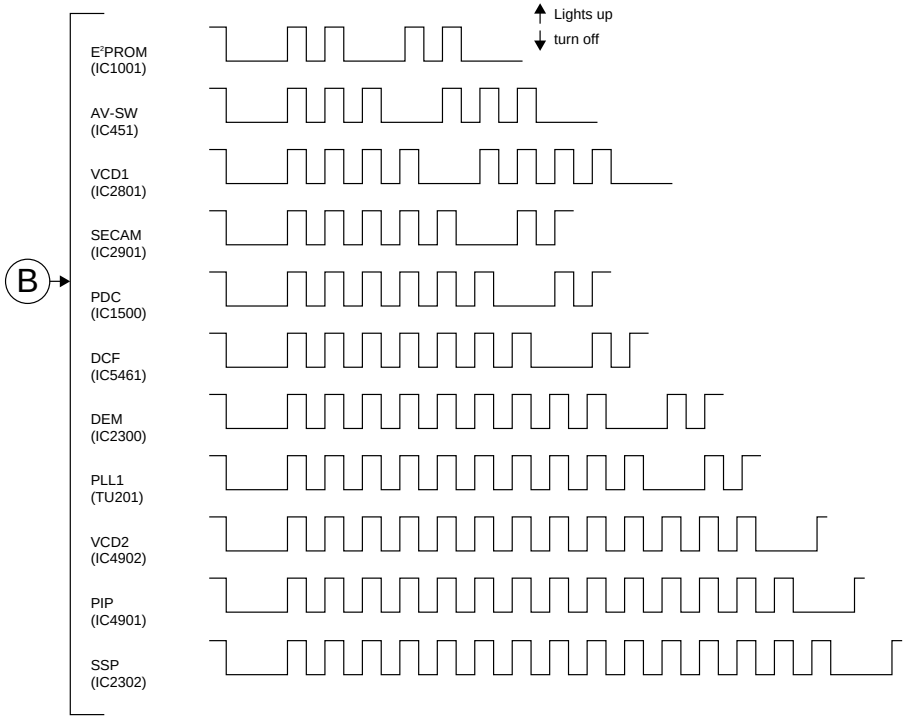
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:

- Power circuit.
- Micon circuit.
- Protector circuit
- Peripheral circuit of Bus Line.


A
Check F2700.
Normal
Blown out
Replace the Fuse.
No
Is the Fuse again blown out?
Yes
Does 5V appear at pin (33) of IC1000?
Check the power circuit consisting of IC1702, T1700 and sub power circuit consisting of IC2700, D2700 and etc.
No
Yes
Check L1002 and the sub power circuit consisting IC2700, D2700 and etc.
Check IC1000, Q1008, Q1750, Q1751 and IC1002.

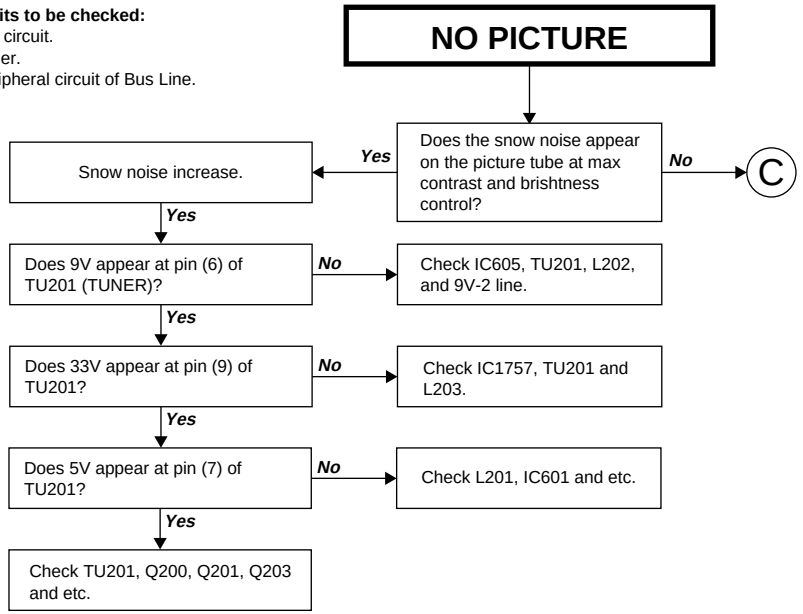
TROUBLE SHOOTING TABLE (Continued)



Other pattern: Other I²C bus control ic or unit. (It has SDA and SCL PORT.)

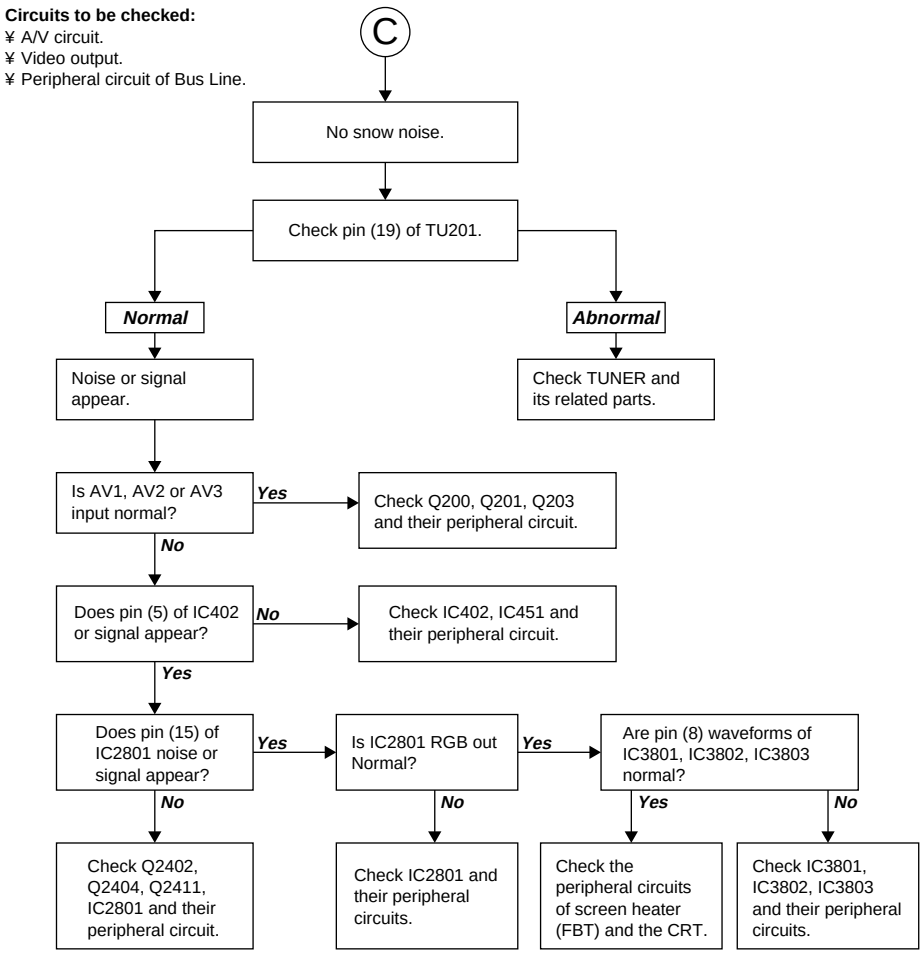
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:
- A/V circuit.
- Tuner.
- Peripheral circuit of Bus Line.


NO PICTURE
Does the snow noise appear on the picture tube at max contrast and brishtness control?
Yes
No
C
Snow noise increase.
Yes
Does 9V appear at pin (6) of TU201 (TUNER)?
No
Check IC605, TU201, L202, and 9V-2 line.
Yes
Does 33V appear at pin (9) of TU201?
No
Check IC1757, TU201 and L203.
Yes
Does 5V appear at pin (7) of TU201?
No
Check L201, IC601 and etc.
Yes
Check TU201, Q200, Q201, Q203 and etc.

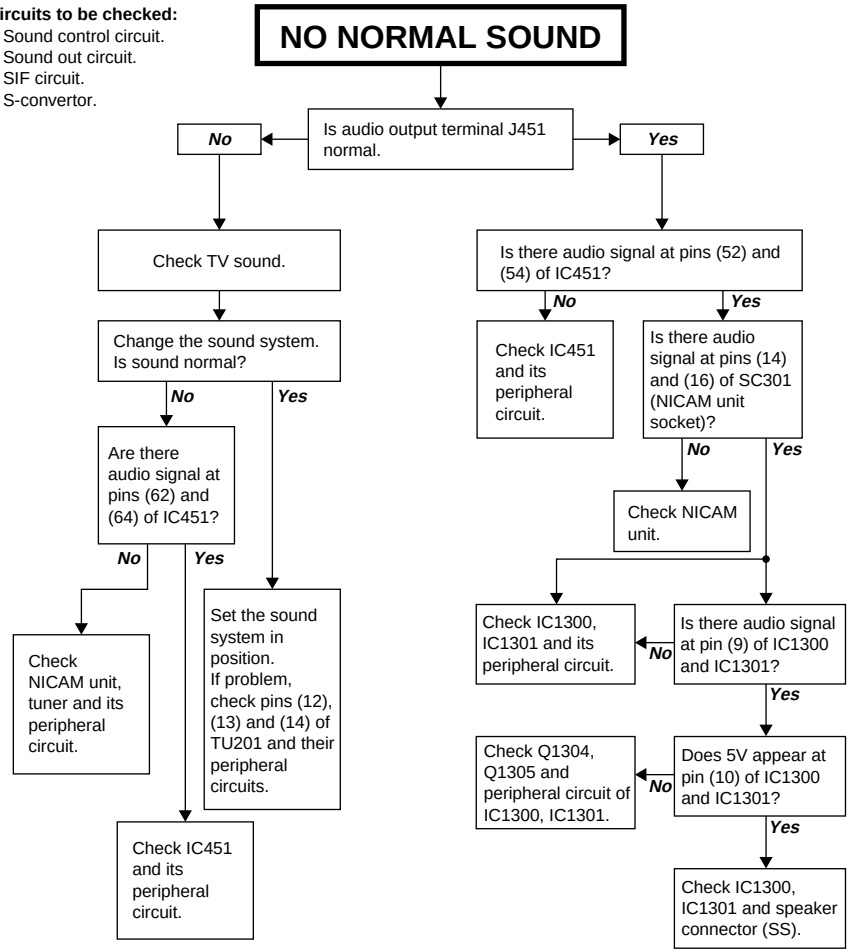
TROUBLE SHOOTING TABLE (Continued)

Circuits to be checked:
- ¥ A/V circuit.
- ¥ Video output.
- ¥ Peripheral circuit of Bus Line.

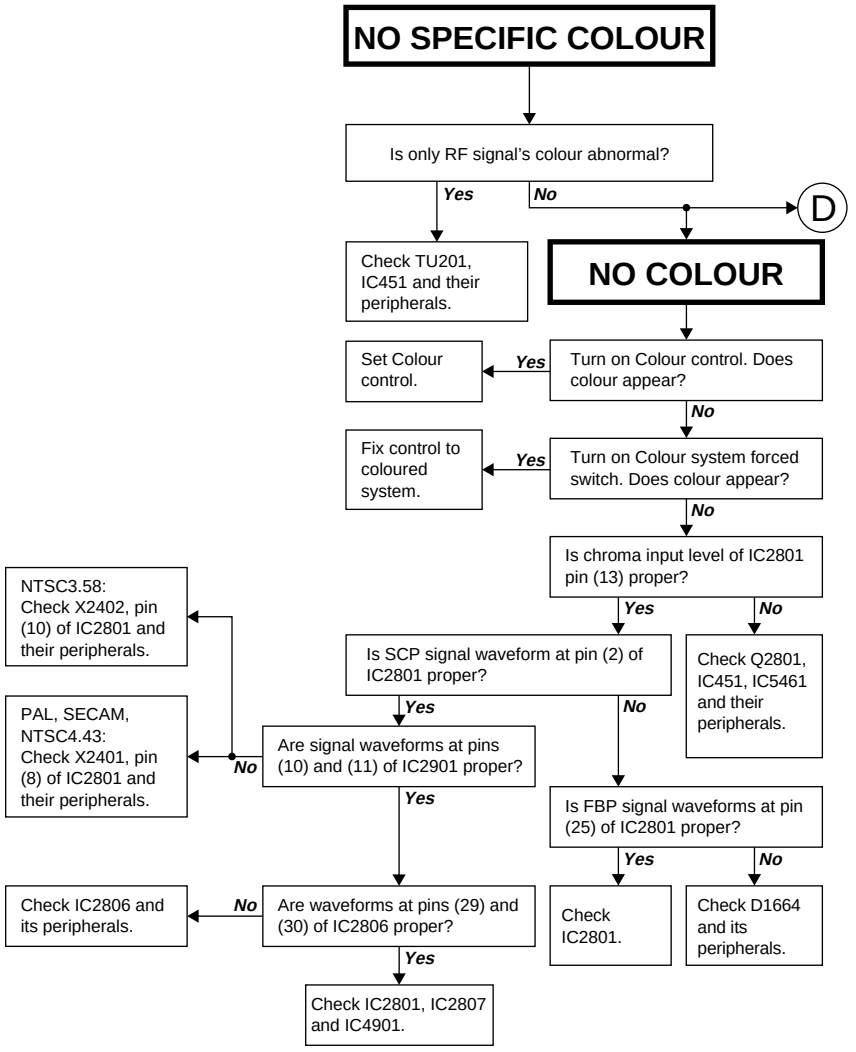

C
No snow noise.
Check pin (19) of TU201.
Normal
Abnormal
Noise or signal appear.
Check TUNER and its related parts.
Is AV1, AV2 or AV3 input normal?
Yes
Check Q200, Q201, Q203 and their peripheral circuit.
No
Does pin (5) of IC402 or signal appear?
No
Check IC402, IC451 and their peripheral circuit.
Yes
Does pin (15) of IC2801 noise or signal appear?
Yes
Is IC2801 RGB out Normal?
Yes
Are pin (8) waveforms of IC3801, IC3802, IC3803 normal?
No
No
Yes
No
Check Q2402, Q2404, Q2411, IC2801 and their peripheral circuit.
Check IC2801 and their peripheral circuits.
Check the peripheral circuits of screen heater (FBT) and the CRT.
Check IC3801, IC3802, IC3803 and their peripheral circuits.

TROUBLE SHOOTING TABLE (Continued)

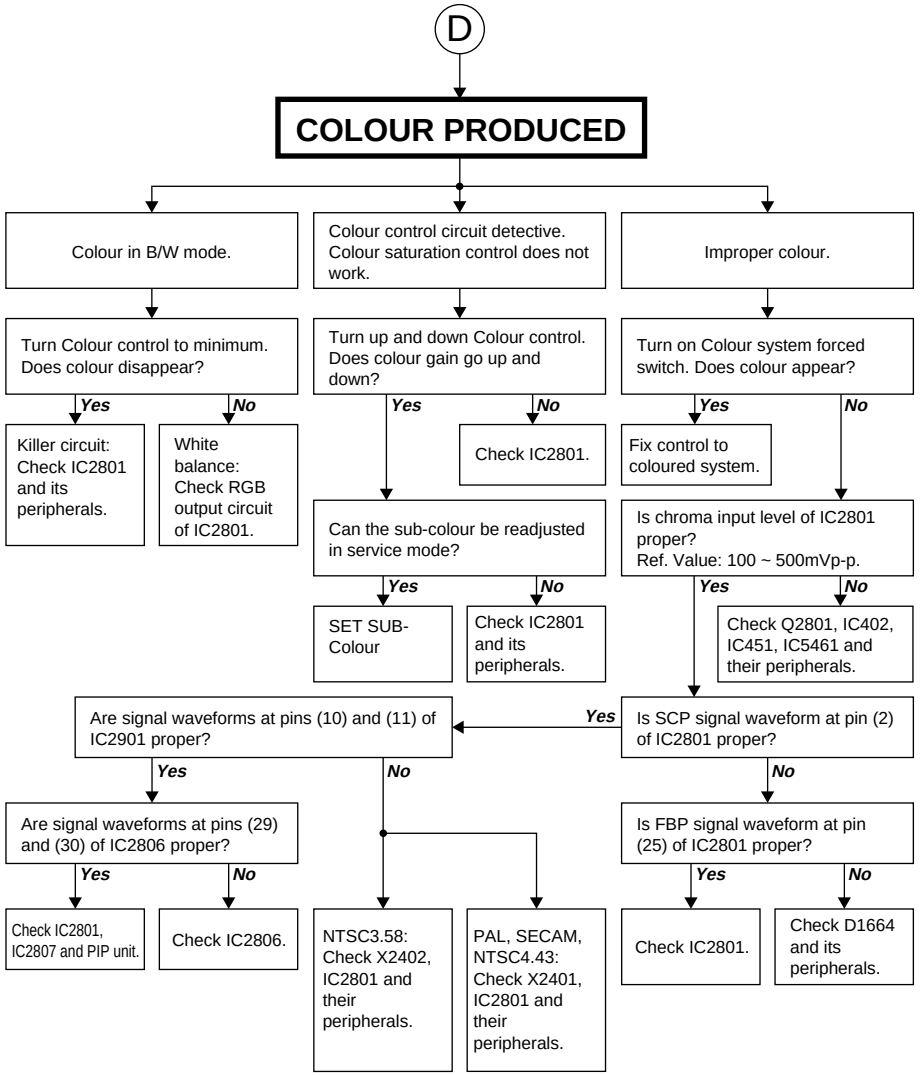
Circuits to be checked:
¥ Sound control circuit.
¥ Sound out circuit.
¥ SIF circuit.
¥ S-convertor.


NO NORMAL SOUND
Is audio output terminal J451 normal.
No
Yes
Check TV sound.
Change the sound system. Is sound normal?
No
Yes
Are there audio signal at pins (62) and (64) of IC451?
No
Yes
Check NICAM unit, tuner and its peripheral circuit.
Set the sound system in position. If problem, check pins (12), (13) and (14) of TU201 and their peripheral circuits.
Check IC451 and its peripheral circuit.
Is there audio signal at pins (52) and (54) of IC451?
No
Yes
Check IC451 and its peripheral circuit.
Is there audio signal at pins (14) and (16) of SC301 (NICAM unit socket)?
No
Yes
Check NICAM unit.
Check IC1300, IC1301 and its peripheral circuit.
No
Is there audio signal at pin (9) of IC1300 and IC1301?
Yes
Check Q1304, Q1305 and peripheral circuit of IC1300, IC1301.
No
Does 5V appear at pin (10) of IC1300 and IC1301?
Yes
Check IC1300, IC1301 and speaker connector (SS).

TROUBLE SHOOTING TABLE (Continued)

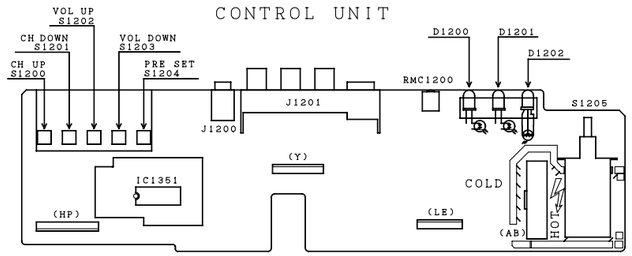

NO SPECIFIC COLOUR
Is only RF signal's colour abnormal?
Yes
No
D
Check TU201, IC451 and their peripherals.
NO COLOUR
Set Colour control.
Yes
Turn on Colour control. Does colour appear?
No
Fix control to coloured system.
Yes
Turn on Colour system forced switch. Does colour appear?
No
Is chroma input level of IC2801 pin (13) proper?
Yes
No
Is SCP signal waveform at pin (2) of IC2801 proper?
Check Q2801, IC451, IC5461 and their peripherals.
Yes
No
NTSC3.58: Check X2402, pin (10) of IC2801 and their peripherals.
PAL, SECAM, NTSC4.43: Check X2401, pin (8) of IC2801 and their peripherals.
No
Are signal waveforms at pins (10) and (11) of IC2901 proper?
Yes
Is FBP signal waveforms at pin (25) of IC2801 proper?
Yes
No
Check IC2806 and its peripherals.
No
Are waveforms at pins (29) and (30) of IC2806 proper?
Yes
Check IC2801.
Check D1664 and its peripherals.
Check IC2801, IC2807 and IC4901.

TROUBLE SHOOTING TABLE (Continued)

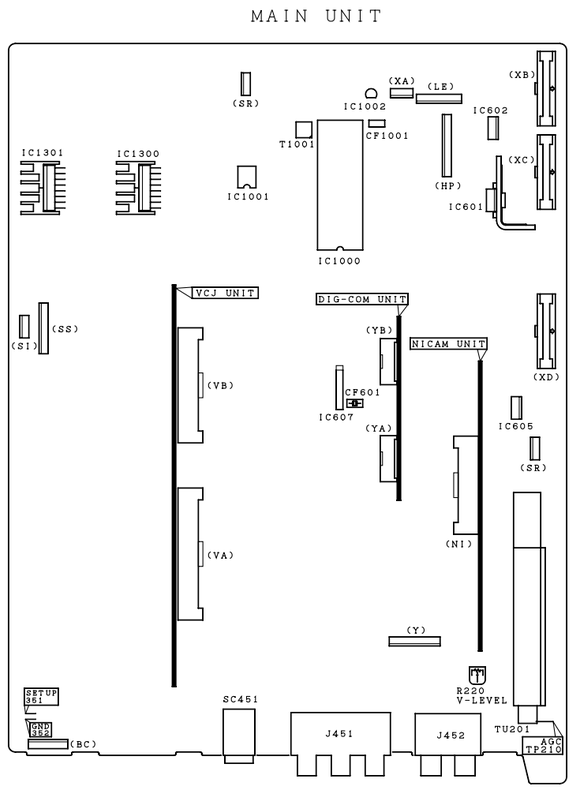

D
COLOUR PRODUCED
Colour in B/W mode.
Colour control circuit detective. Colour saturation control does not work.
Improper colour.
Turn Colour control to minimum. Does colour disappear?
Turn up and down Colour control. Does colour gain go up and down?
Turn on Colour system forced switch. Does colour appear?
Yes
No
Killer circuit: Check IC2801 and its peripherals.
White balance: Check RGB output circuit of IC2801.
Check IC2801.
Fix control to coloured system.
Can the sub-colour be readjusted in service mode?
Is chroma input level of IC2801 proper? Ref. Value: 100 ~ 500mVp-p.
SET SUB-Colour
Check IC2801 and its peripherals.
Check Q2801, IC402, IC451, IC5461 and their peripherals.
Are signal waveforms at pins (10) and (11) of IC2901 proper?
Is SCP signal waveform at pin (2) of IC2801 proper?
Are signal waveforms at pins (29) and (30) of IC2806 proper?
Is FBP signal waveform at pin (25) of IC2801 proper?
Check IC2801, IC2807 and PIP unit.
Check IC2806.
NTSC3.58: Check X2402, IC2801 and their peripherals.
PAL, SECAM, NTSC4.43: Check X2401, IC2801 and their peripherals.
Check IC2801.
Check D1664 and its peripherals.

CHASSIS LAYOUT

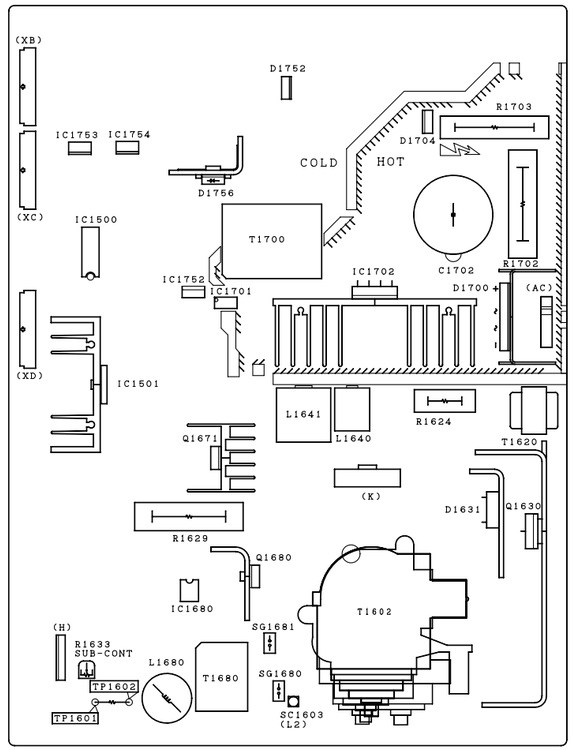
CONTROL UNIT



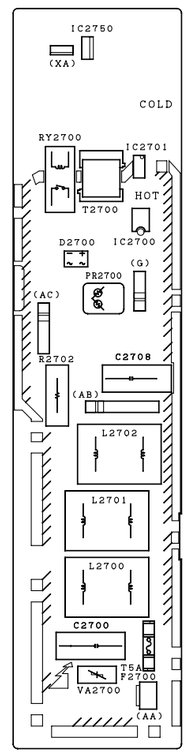
MAIN UNIT



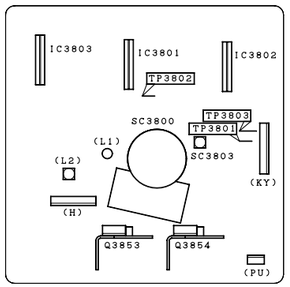
POWER UNIT



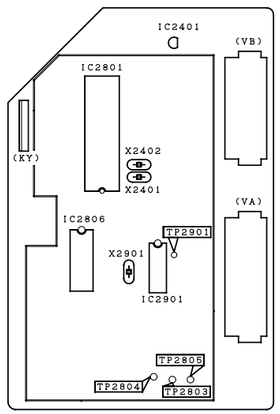
SUB-POW UNIT



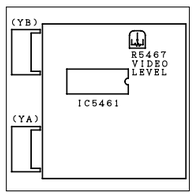
CRT UNIT



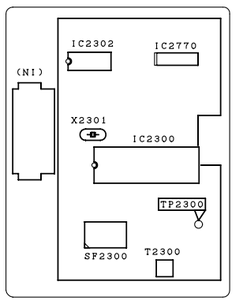
VCJ UNIT



DIG-COM UNIT

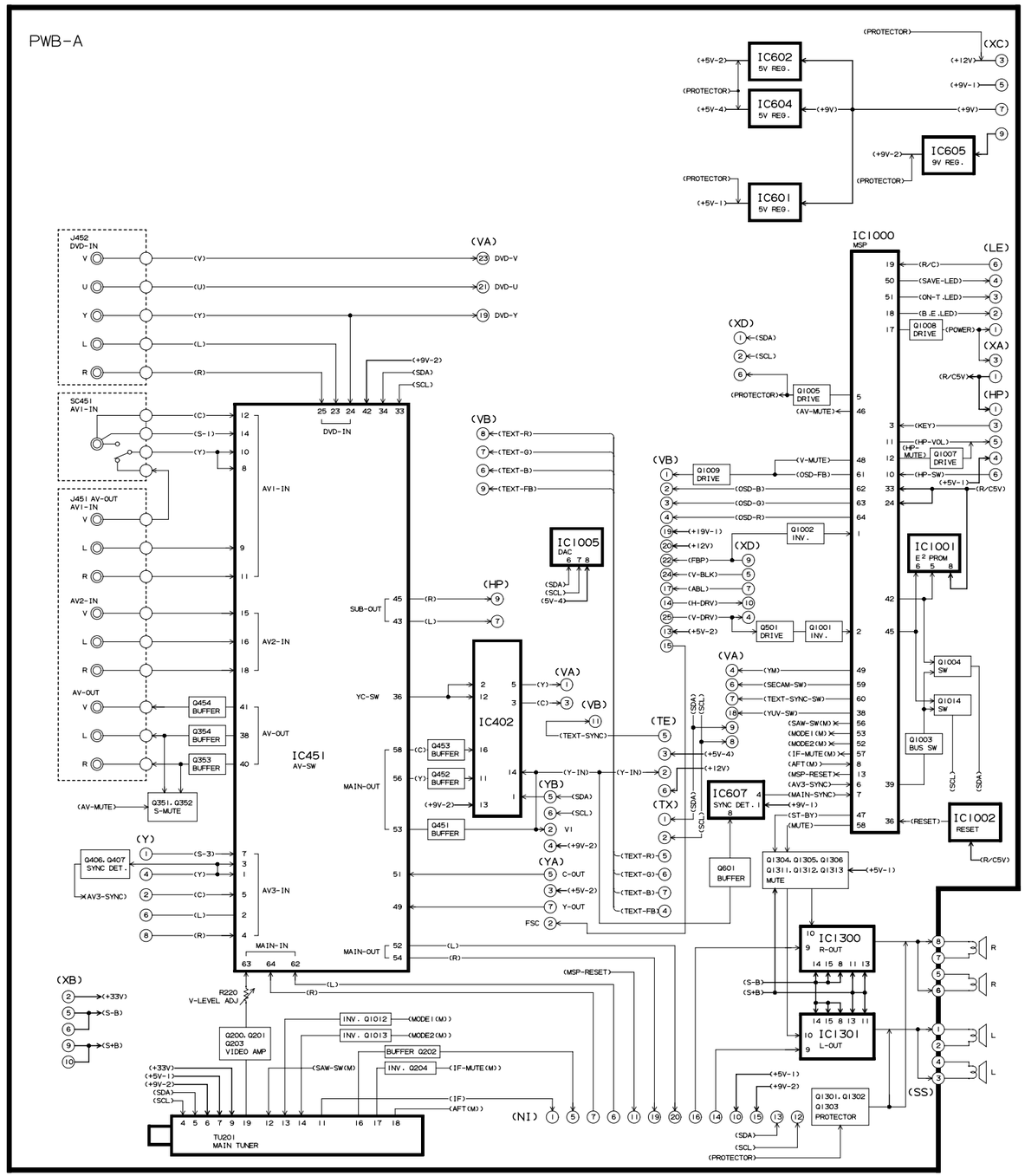


NICAM UNIT



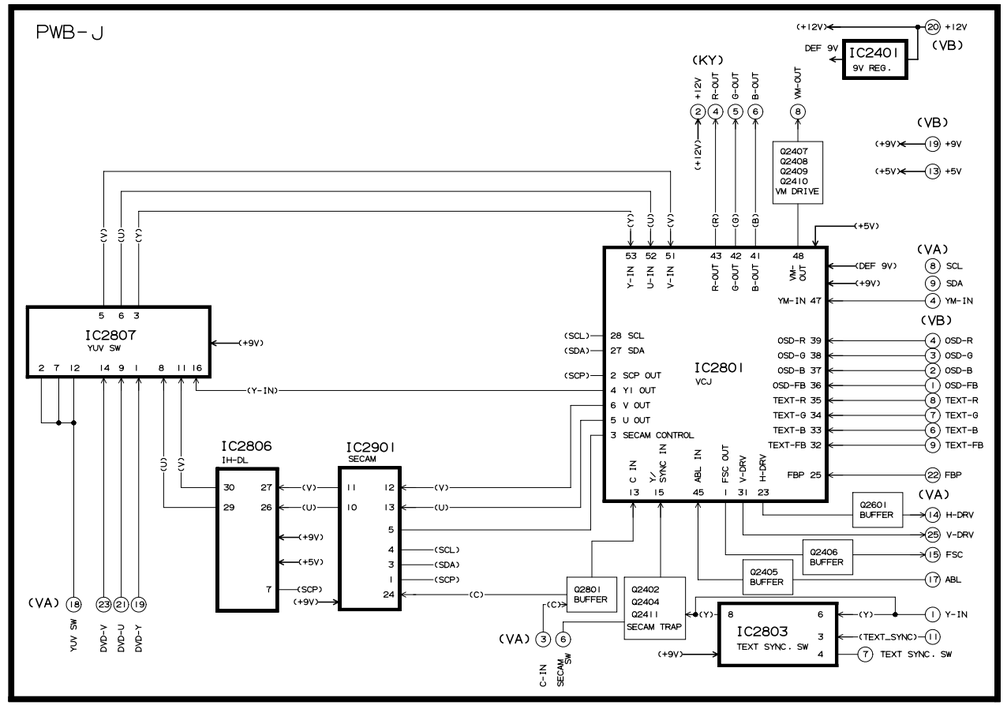
1	2	3	4	5	6	7	8	9	10	11	12

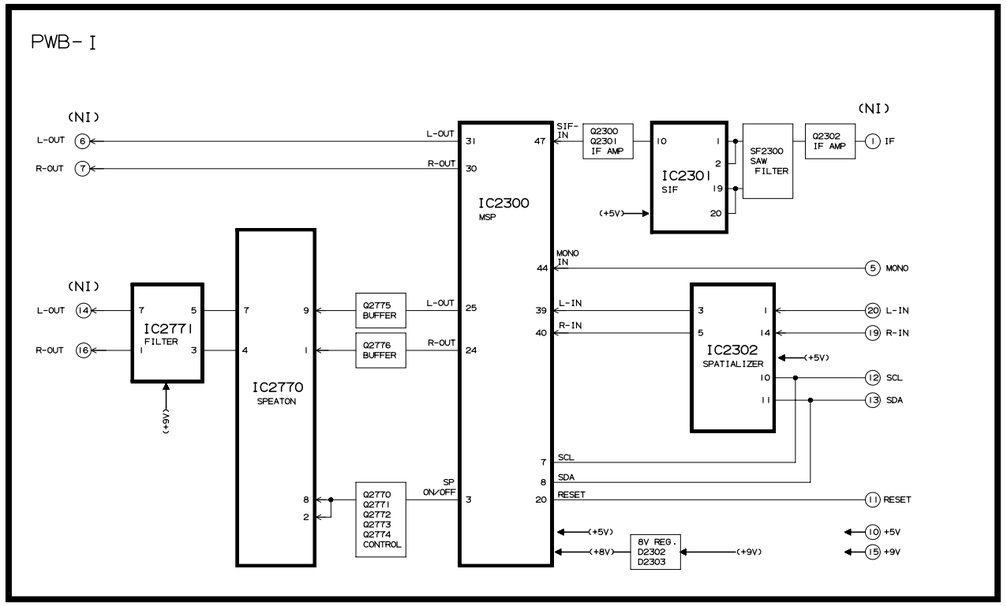
BLOCK DIAGRAM-1

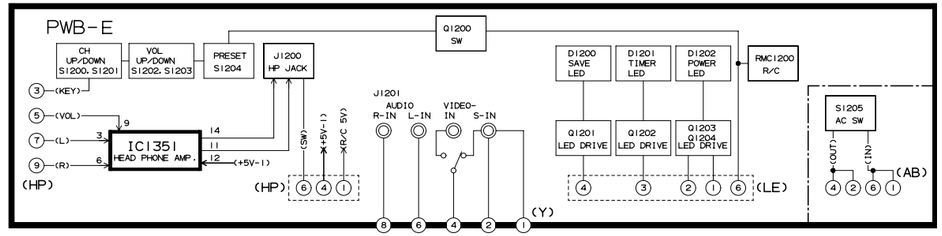


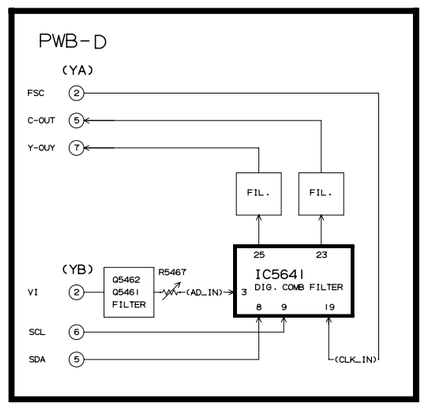
1	2	3	4	5	6	7	8	9	10	11	12

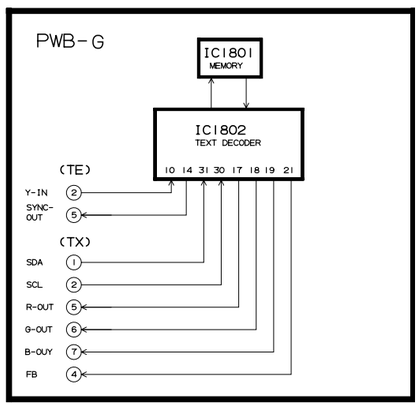
BLOCK DIAGRAM-2





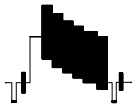






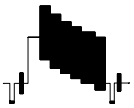
WAVEFORMS

① 1.0 Vp-p



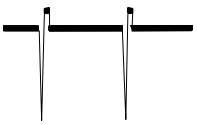
Horiz Rate

② 2.0 Vp-p



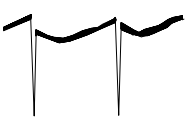
Horiz Rate

③ 5.0 Vp-p



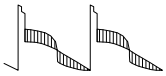
Vert Rate

④ 1.2 Vp-p



Vert Rate

⑤ 58 Vp-p



Vert Rate

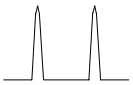
⑥ 60m Vp-p

Horiz Rate

⑦ 220 Vp-p

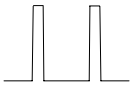
Horiz Rate

⑧ 1150 Vp-p



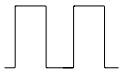
Horiz Rate

⑨ 9.6 Vp-p



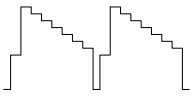
Horiz Rate

⑩ 3 Vp-p



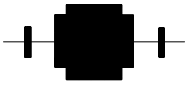
Horiz Rate

⑪ 0.8 Vp-p



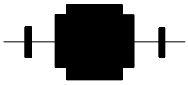
Horiz Rate

⑫ 0.52 Vp-p



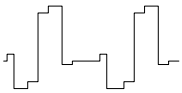
Horiz Rate

⑬ 0.3 Vp-p



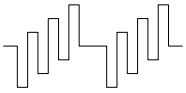
Horiz Rate

⑭ 0.8 Vp-p



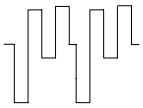
Horiz Rate

⑮ 0.6 Vp-p



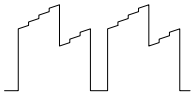
Horiz Rate

⑯ 3.0 Vp-p



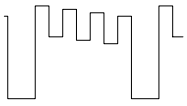
Horiz Rate

⑰ 3.0 Vp-p



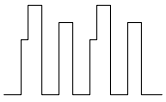
Horiz Rate

⑱ 3.0 Vp-p



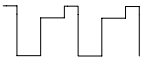
Horiz Rate

⑲ 150 Vp-p



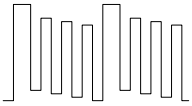
Horiz Rate

⑳ 150 Vp-p



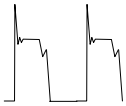
Horiz Rate

㉑ 150 Vp-p



Horiz Rate

㉒ 380 Vp-p(AC110V)
520 Vp-p(AC220V)



Horiz Rate

DESCRIPTION OF SCHEMATIC DIAGRAM

SAFETY NOTES:

1. *DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.*
2. *SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.*

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "⚠" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

SERVICE PRECAUTION:

THE AREA ENCLOSED BY THIS LINE (▬ ▬ ▬) IS DIRECTLY CONNECTED WITH AC MAINS VOLTAGE.
WHEN SERVICING THE AREA, CONNECT AN ISOLATING TRANSFORMER BETWEEN TV RECEIVER AND AC LINE TO ELIMINATE HAZARD OF ELECTRIC SHOCK.

NOTES:

1. *The unit of resistance "ohm" is omitted. (K = 1000 ohms, M = Meg ohm).*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μF, unless therwise noted. (P = μμF).*

VOLTAGE MEASUREMENT CONDITIONS:

1. *Voltage in parenthesis measured with no Signal.*
2. *Voltages without parenthesis measured with PAL Colour-Signal.*
3. *All the voltages in each point are measured with high impedence volt-meter.*

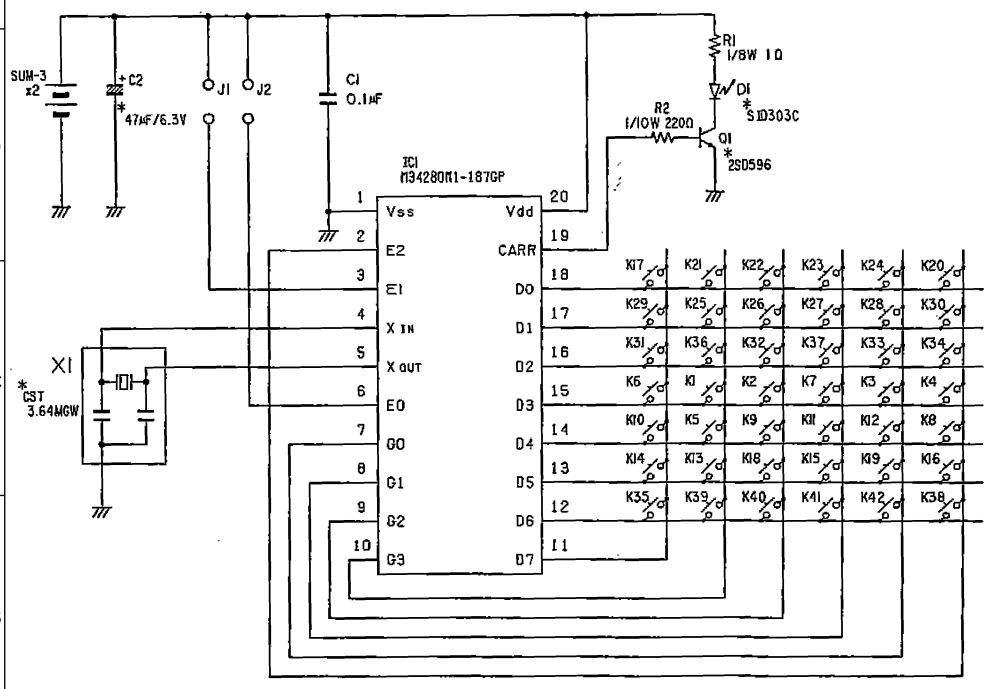
WAVEFORM MEASUREMENT CONDITIONS:

1. *Colour bar generator signal of 1.8V peak to peak applied at Base of Video Buffer Amp. Q200.*
2. *Approximately 4.0 V AGC bias.*

■ Infrared Remote Control Unit

RRMCG1497PESA

NOTE : The parts here shown are supplied as an assembly but not independently.

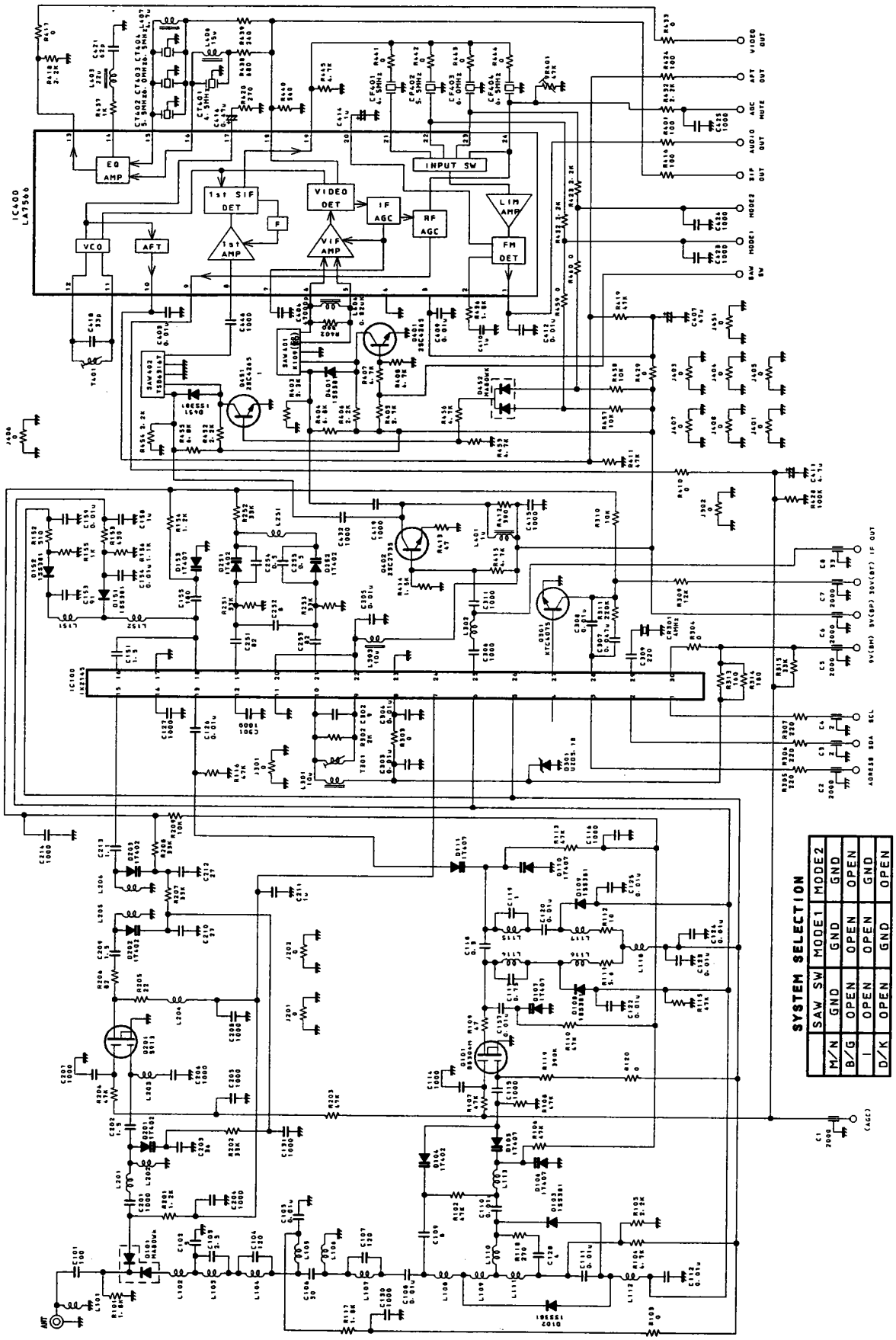


Key No.	Key name
K1	POWER
K2	SAVE
K3	CALL
K4	TV/VIDEO
K5	MUTE
K6	1
K7	2
K8	3
K9	ENTERTAINMENT
K10	4
K11	5
K12	6
K13	SPATIALIZER
K14	7
K15	8
K16	9
K17	MPX MODE
K18	⊂
K19	0
K20	-/--
K21	A(TEXT RED)
K22	B(TEXT GREEN)
K23	C(TEXT YELLOW)
K24	D(TEXT CYAN)
K25	VOL DOWN
K26	CH UP
K27	VOL UP
K28	CH DOWN
K29	NORMAL
K30	MENU

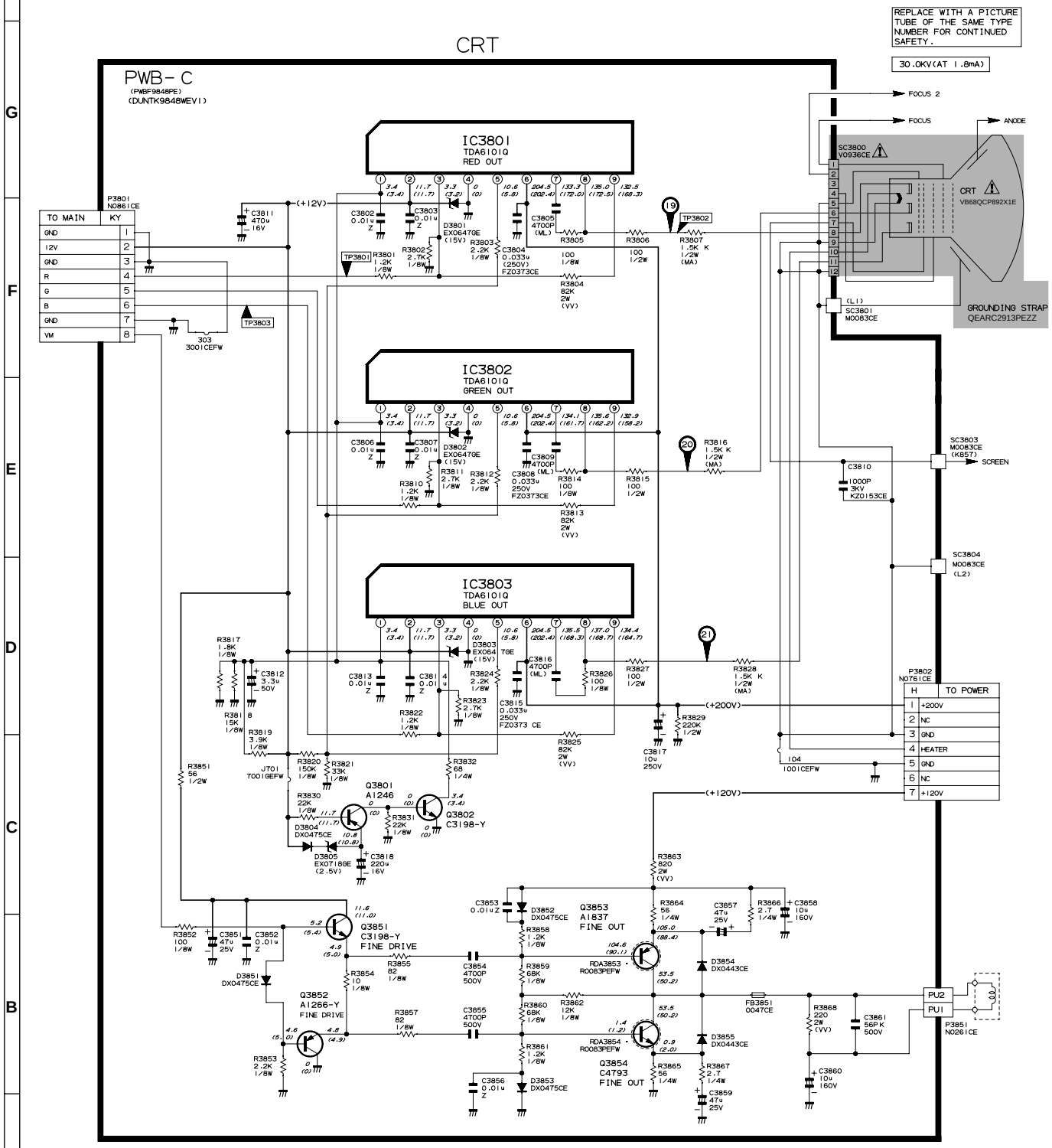
■ Tuner

⚠ VTUVTBT6ED265

NOTE : The parts here shown are supplied as an assembly but not independently.



SCHEMATIC DIAGRAM: CRT Unit



SCHEMATIC DIAGRAM: MAIN Unit -1

MAIN

PWB-A
(GPWBF9859PEN)
(DUNTK9859WEV2)

IC451
CXA2069Q

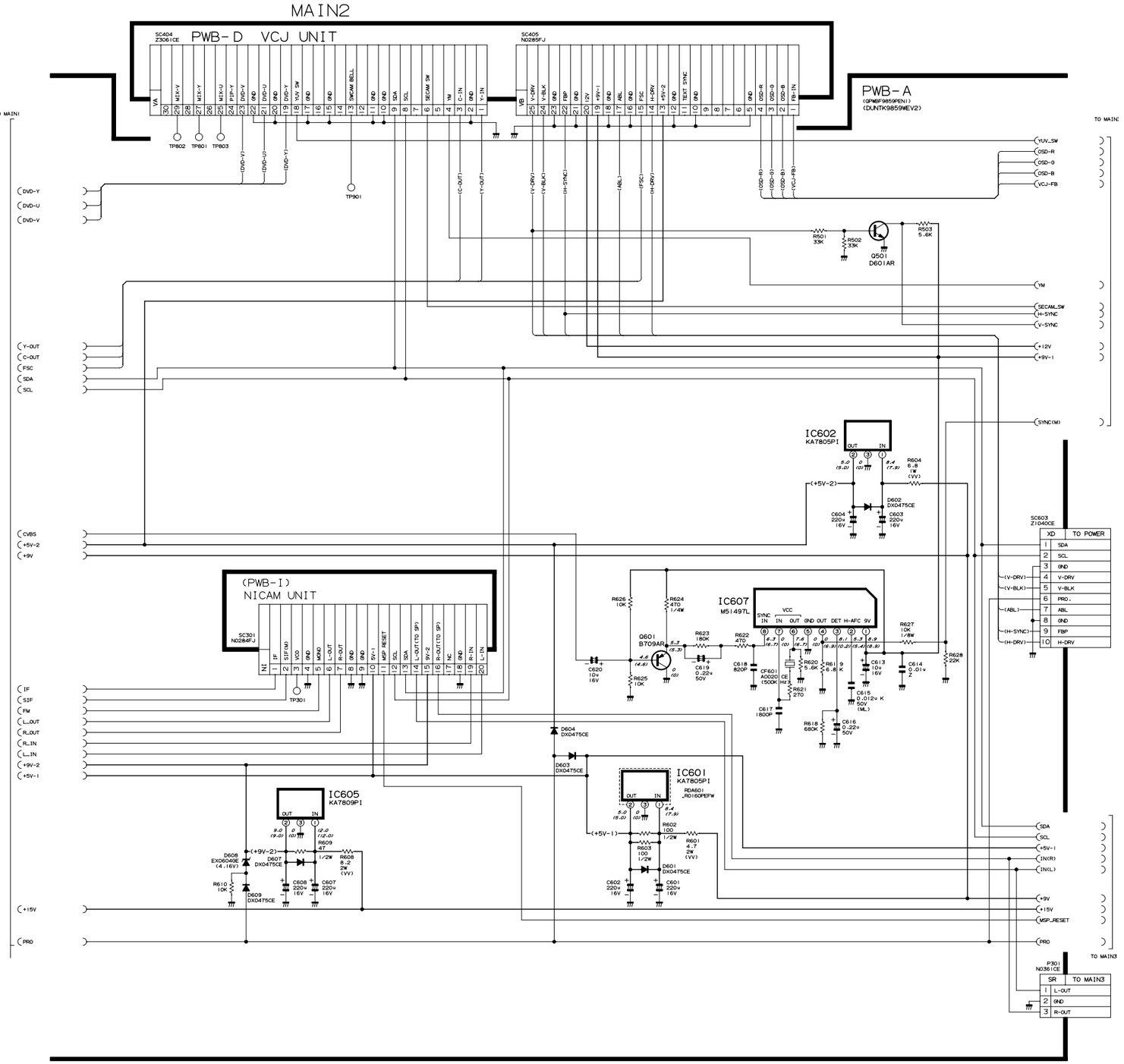
IC402
M52055FP

SC401
NO785CE

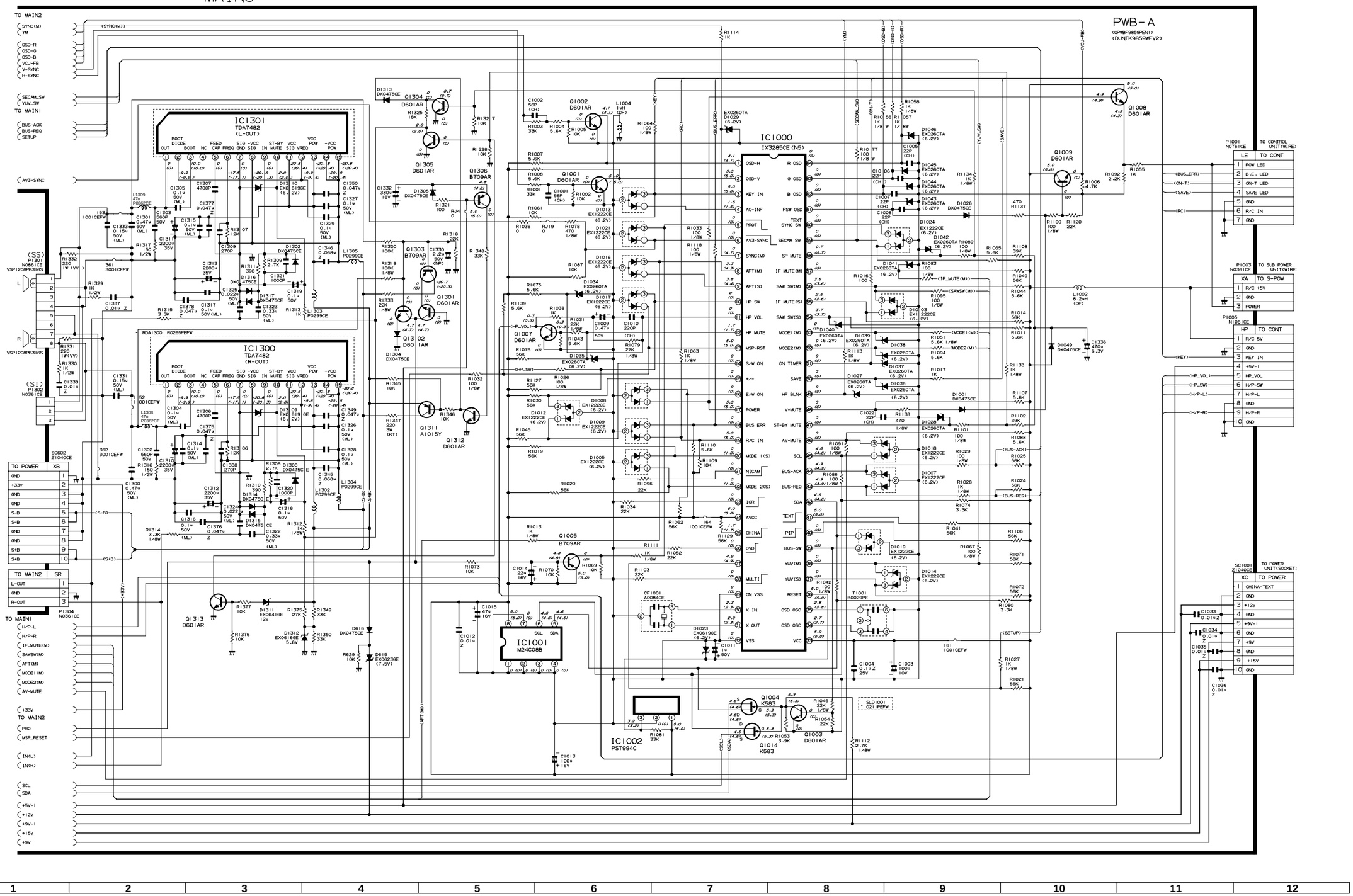
SC402
NO785CE

PWB-J
DIG.COM
UNIT

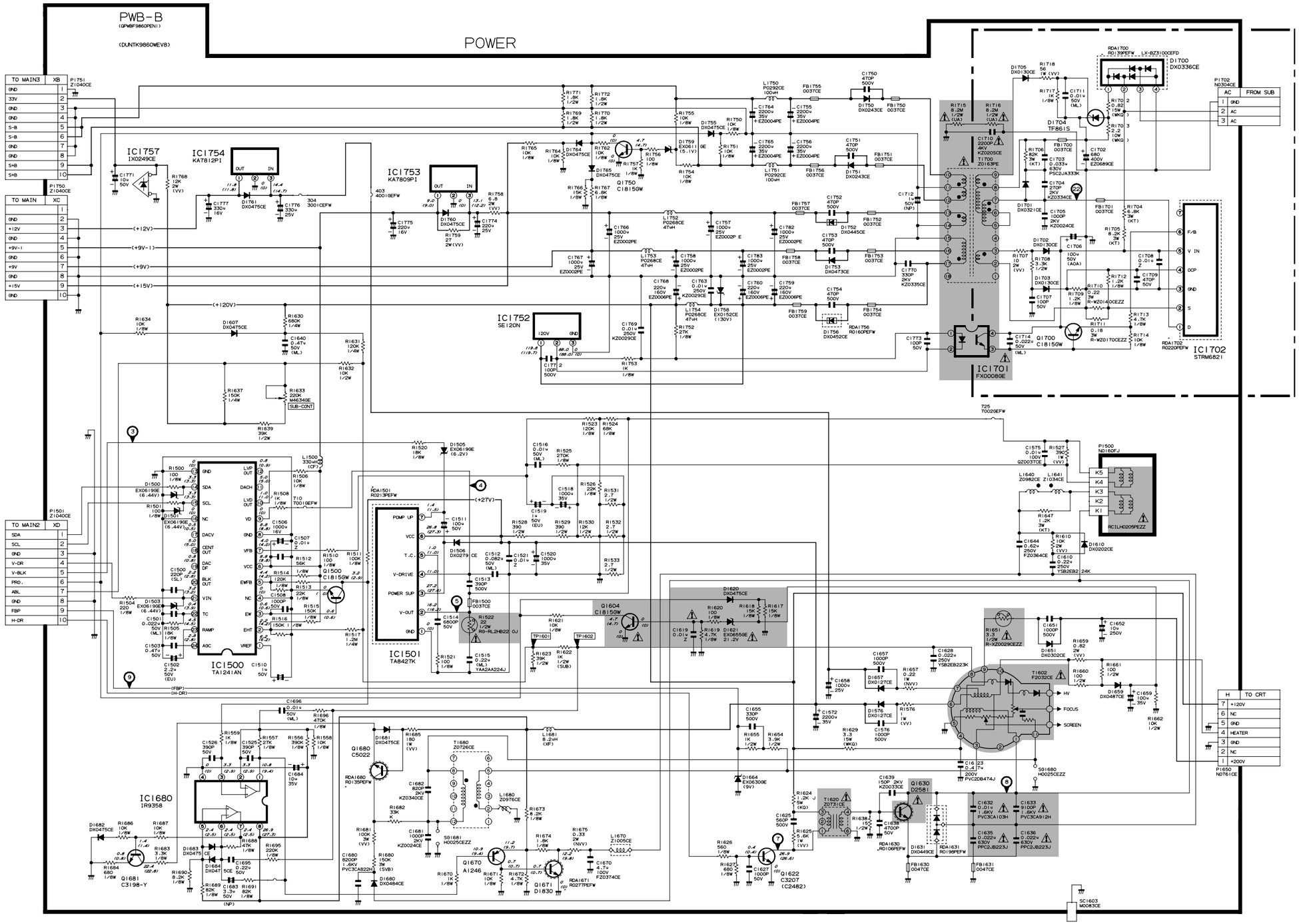
SCHEMATIC DIAGRAM: MAIN Unit -2



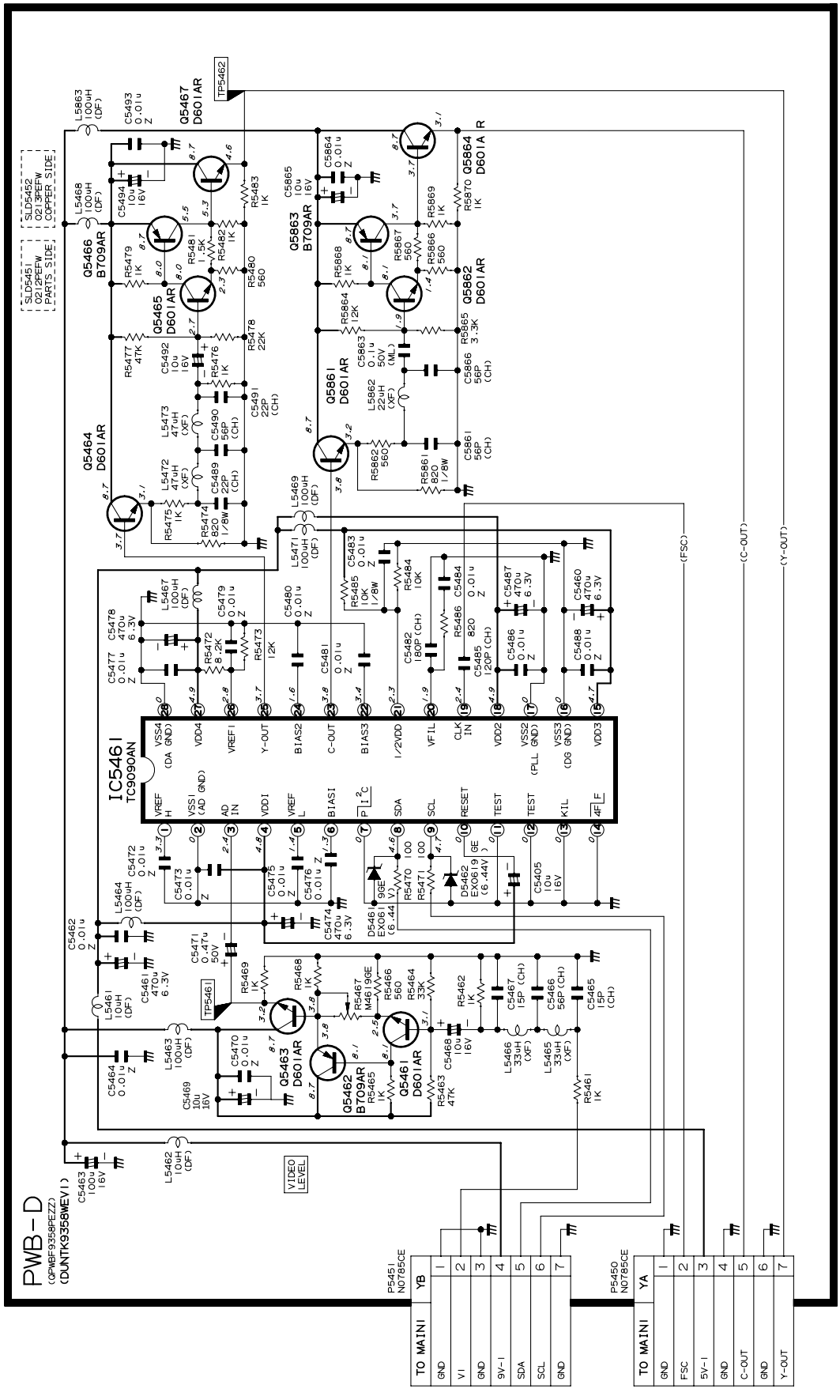
SCHEMATIC DIAGRAM: MAIN Unit -3



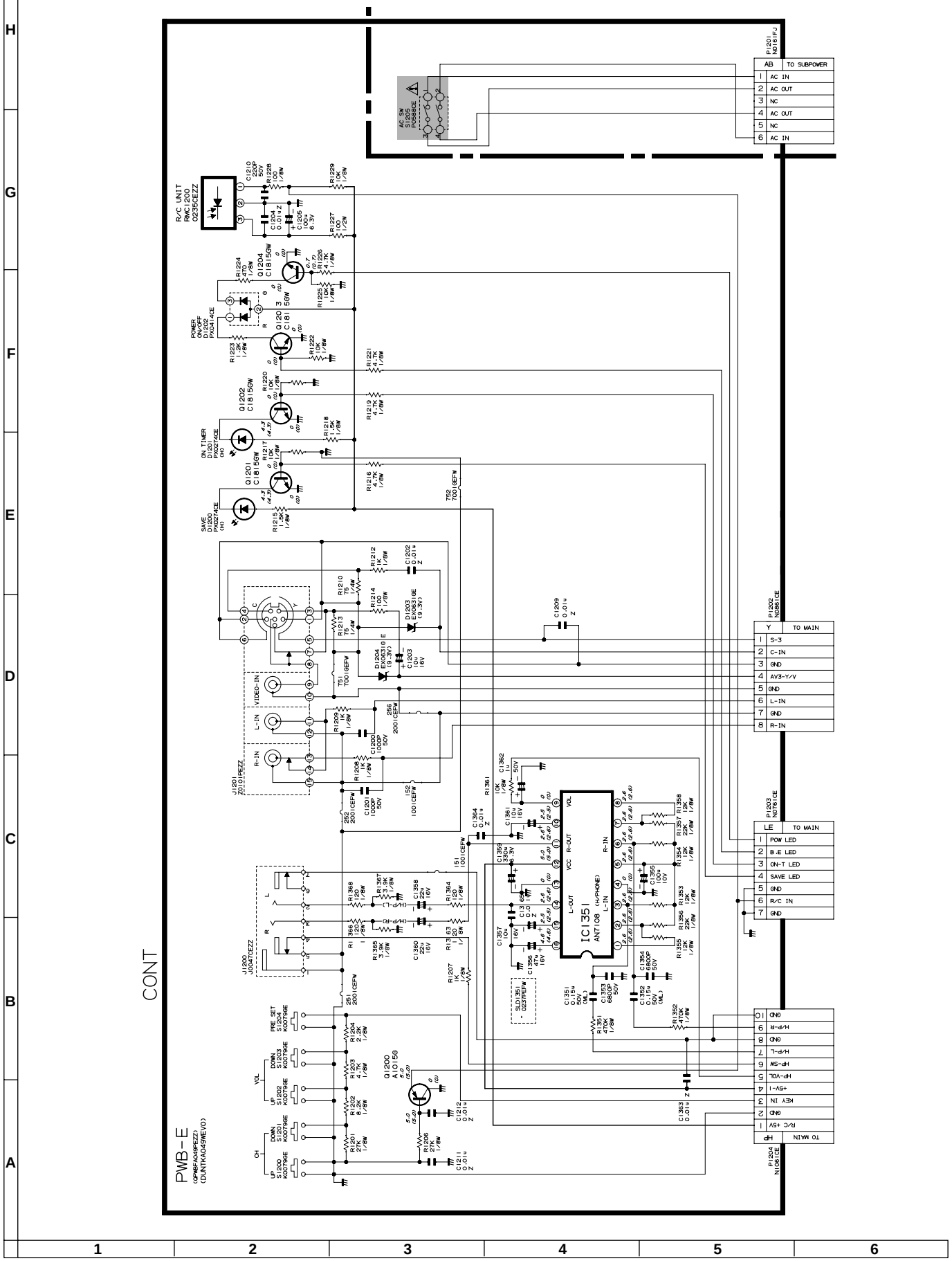
SCHEMATIC DIAGRAM: POWER Unit



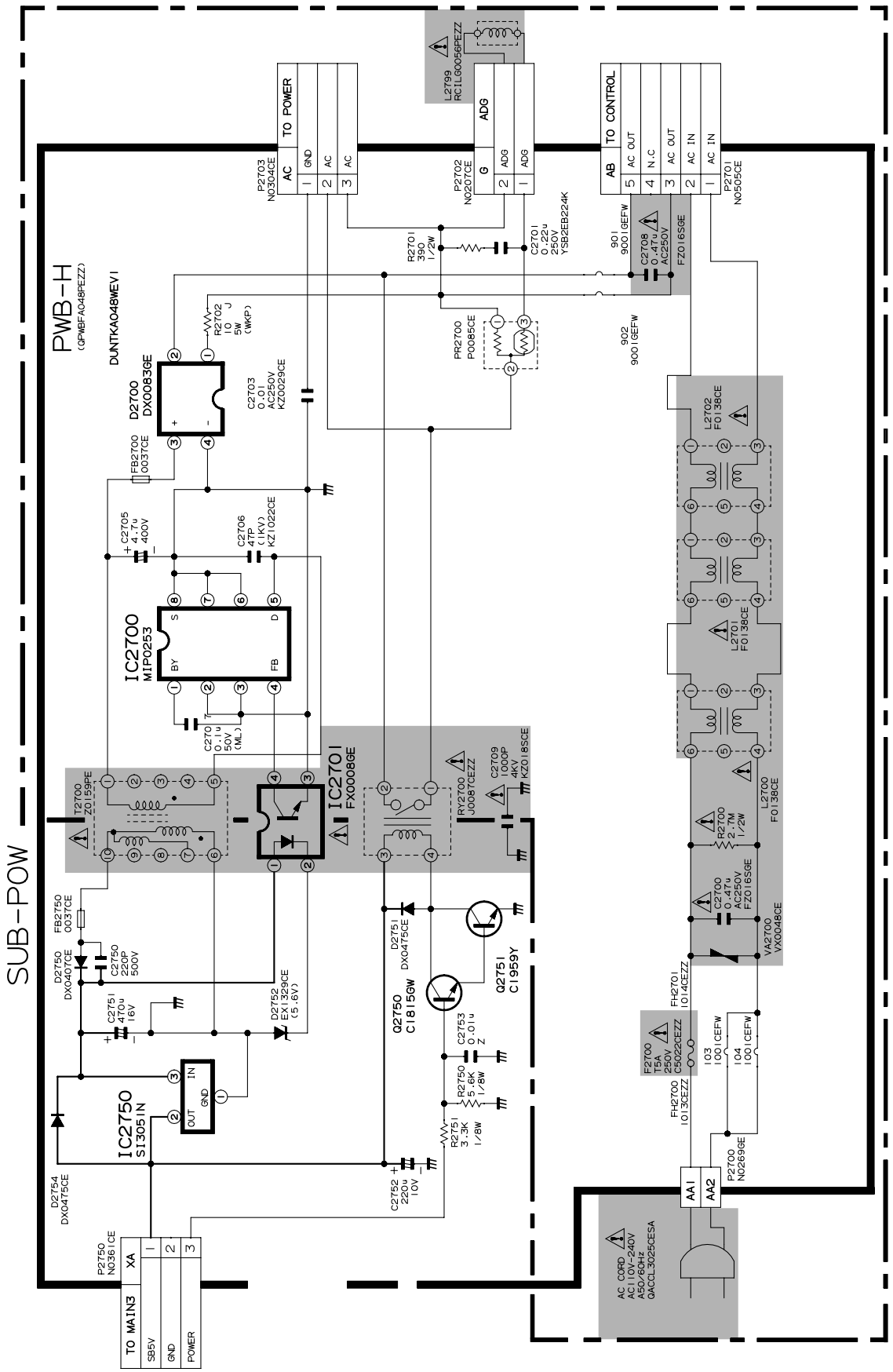
SCHEMATIC DIAGRAM: DIG COM Unit



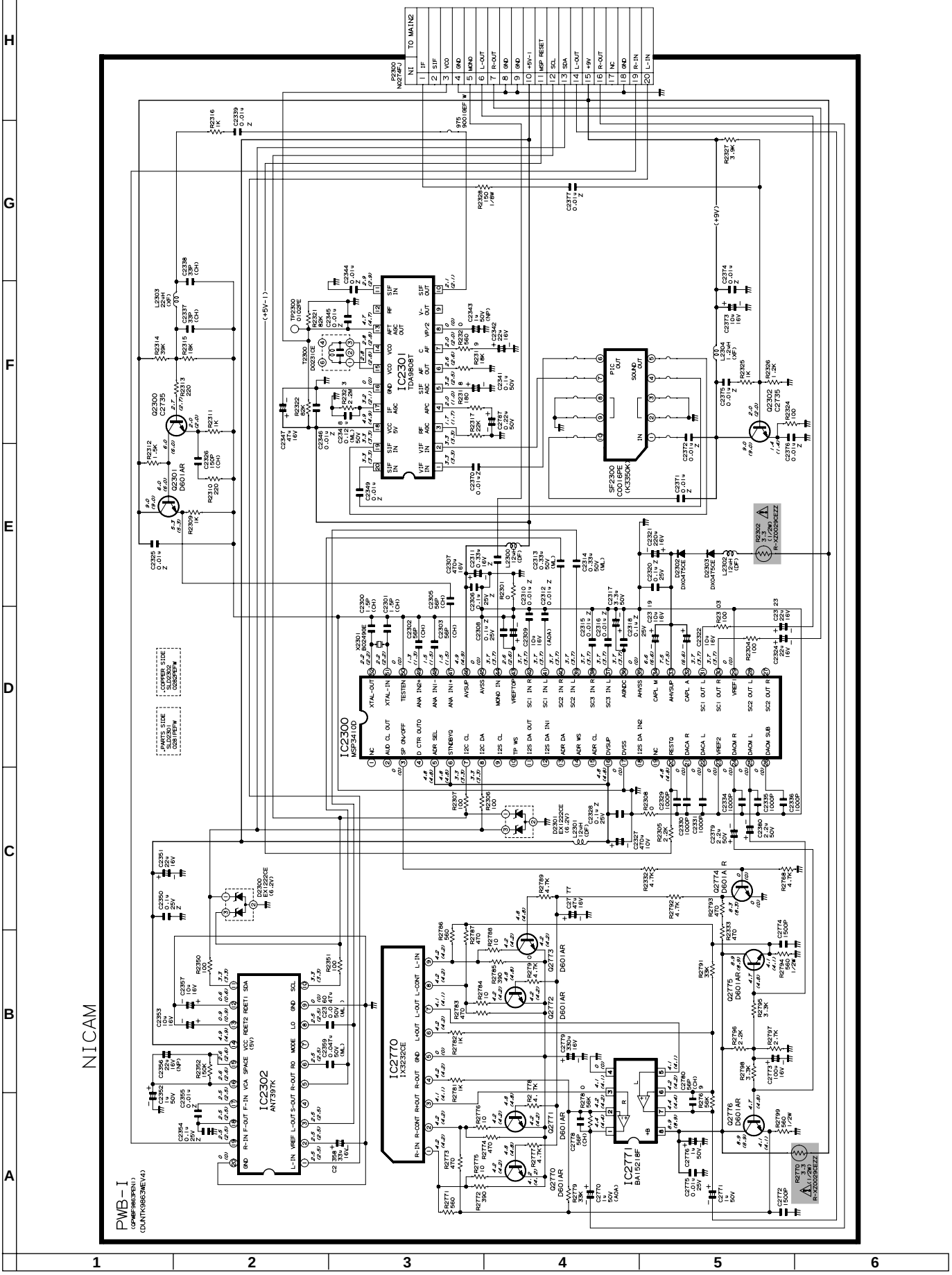
SCHEMATIC DIAGRAM: CONTROL Unit



SCHEMATIC DIAGRAM: SUB POWER Unit



SCHEMATIC DIAGRAM: NICAM Unit



SCHEMATIC DIAGRAM: VCJ Unit

VCJ

PWB-J
(QPWBF986(PEN1)
(DUNTK986(WEVB)

IC2807
M52055FP

IC2806
TA8772AN

IC2901
TA1229N

IC2801
IX3323CE

IC2401
TA78L09S

Q2410 D601AR
Q2408 D601AR
Q2409 D601AR
Q2407 D601AR
Q2406 D601AR
Q2411 D601AR
Q2402 B709AR
Q2401 D601AR
Q2404 D601AR
Q2405 B709AR
Q2601 D601AR

P2404 N0861CE

KY	TO CRT
1	GND
2	+12V
3	GND
4	R
5	G
6	B
7	GND
8	VM

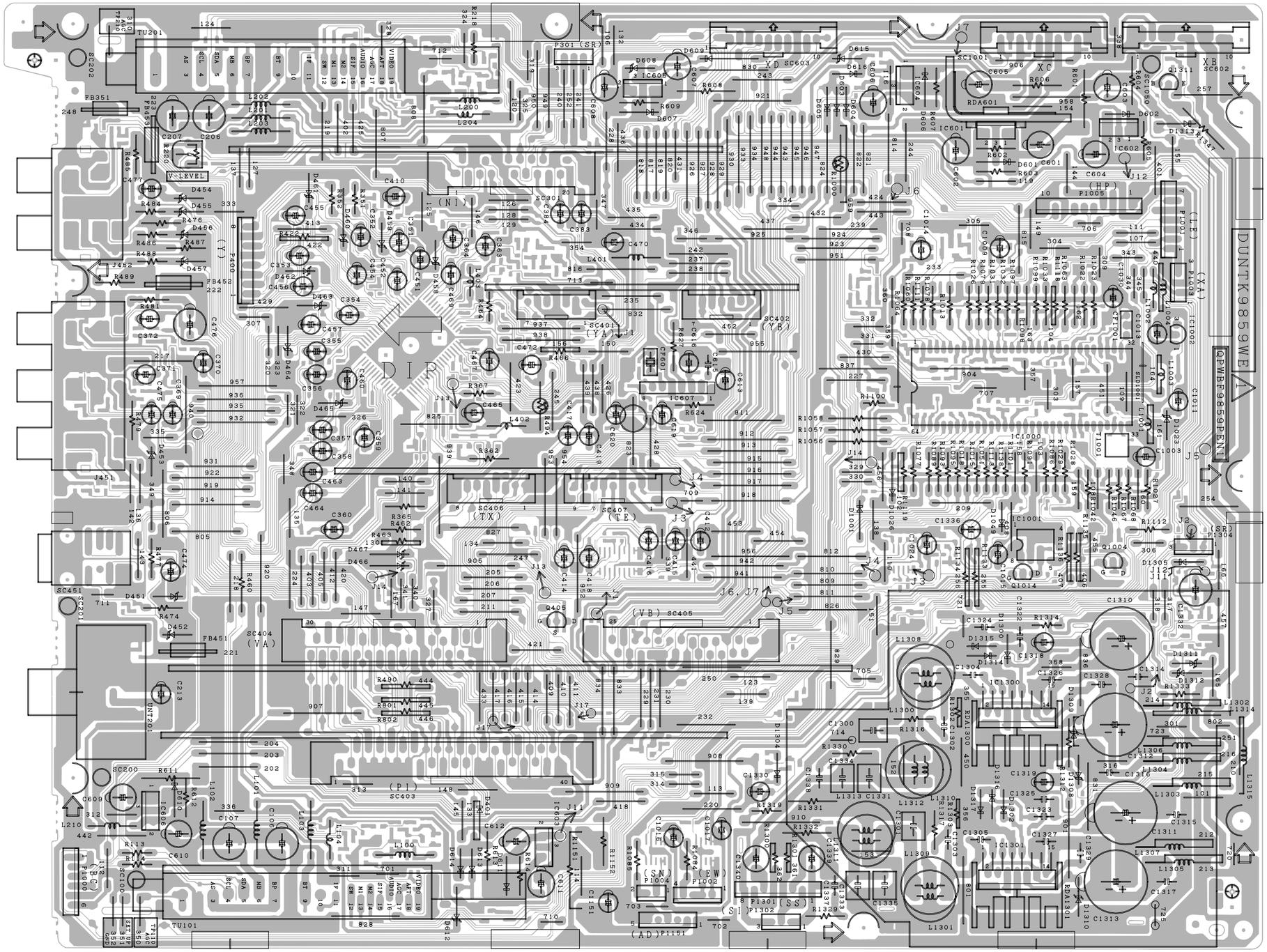
P2401 Z3061CE

TO MAIN2	VA
	30
MIX-V	29
MIX-Y	28
MIX-U	27
	26
DVD V-IN	25
GND	24
DVD U-IN	23
GND	22
DVD Y-IN	21
VCV SW	20
GND	19
GND	18
GND	17
SECAM BELL	16
	15
GND	14
SDA	13
SCL	12
	11
SECAM SW	10
	9
YW	8
C-IN	7
GND	6
Y-IN	5
	4
	3
	2
	1

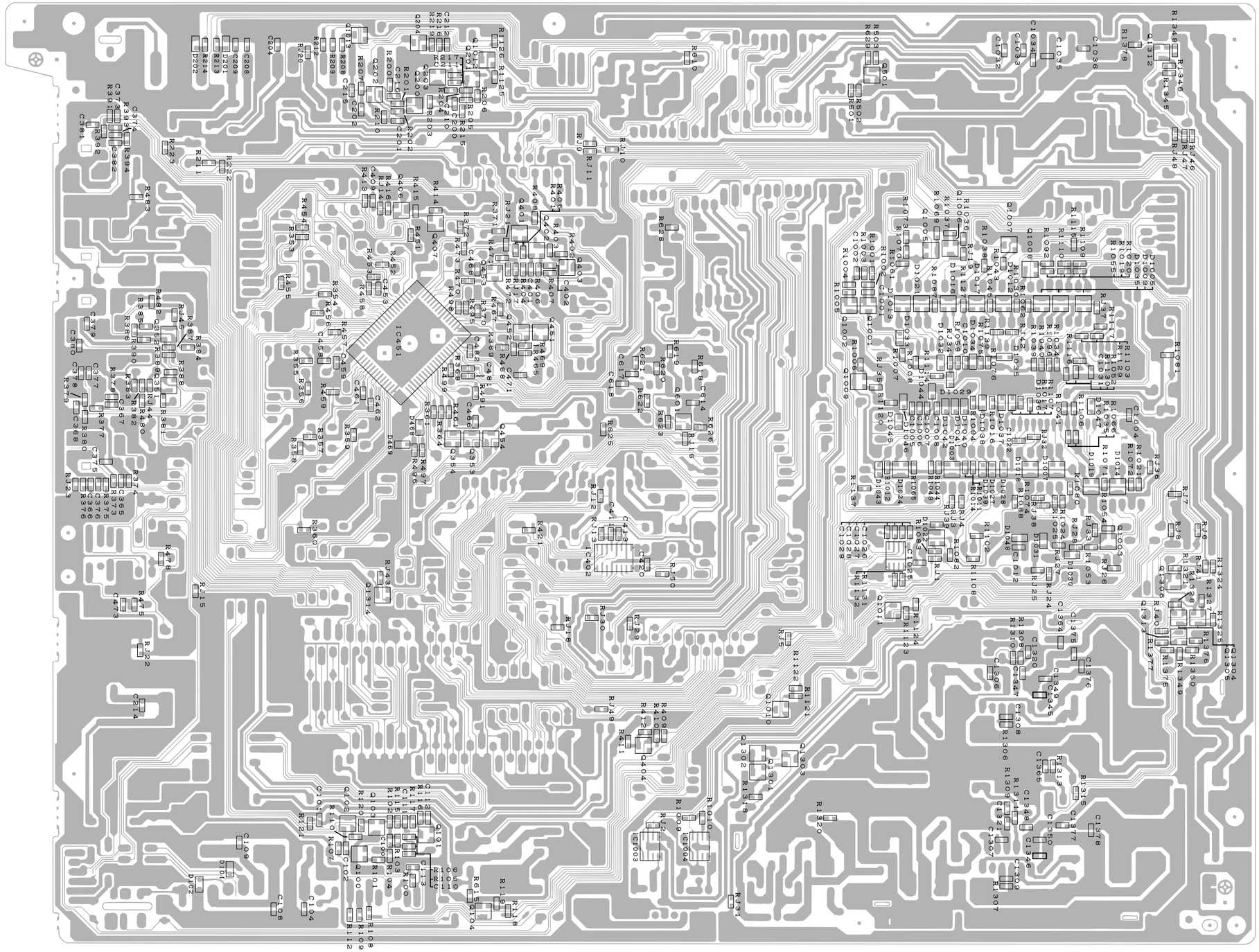
P2402 N0275FJ

TO MAIN2	VB
	25
V-DRV	24
V-BLK	23
GND	22
FBP	21
GND	20
+12V	19
9V	18
GND	17
ABL	16
GND	15
FSC	14
H-DRV	13
+5V	12
GND	11
	10
GND	9
	8
	7
	6
	5
GND	4
OSD R-IN	3
OSD G-IN	2
OSD B-IN	1
FB	

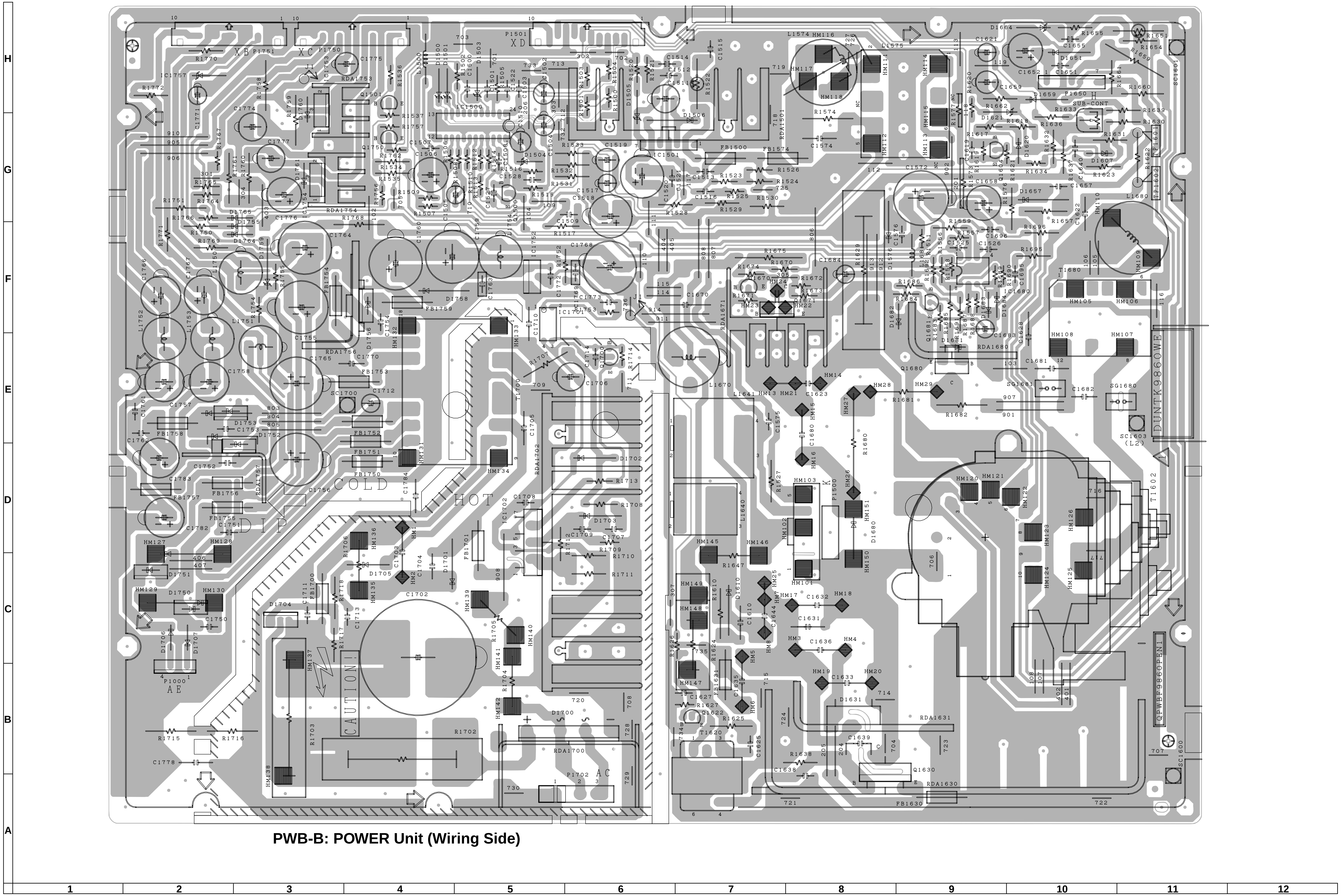
PRINTED WIRING BOARD ASSEMBLIES



PWB-A: MAIN Unit (Wiring Side)

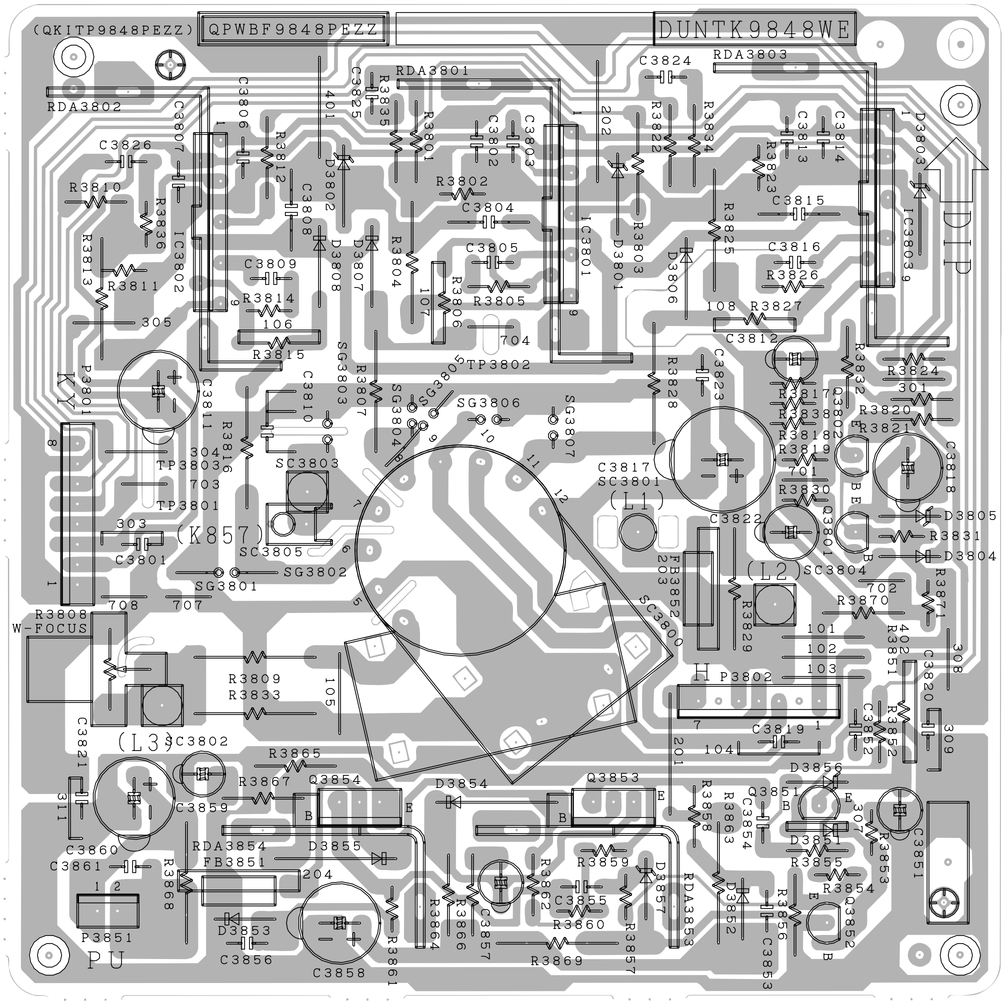


PWB-A: MAIN Unit (Wiring Side)(Chip Parts)



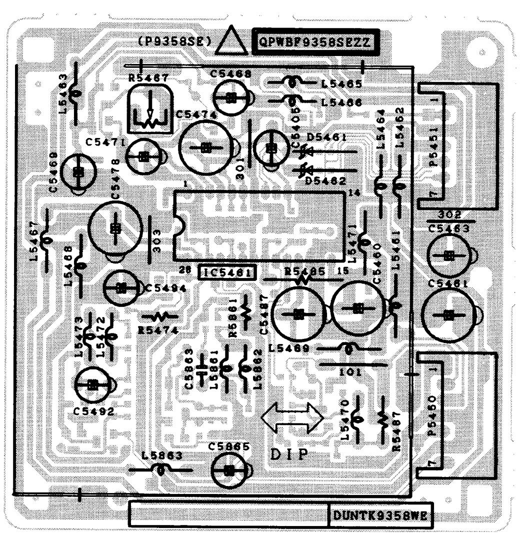
PWB-B: POWER Unit (Wiring Side)

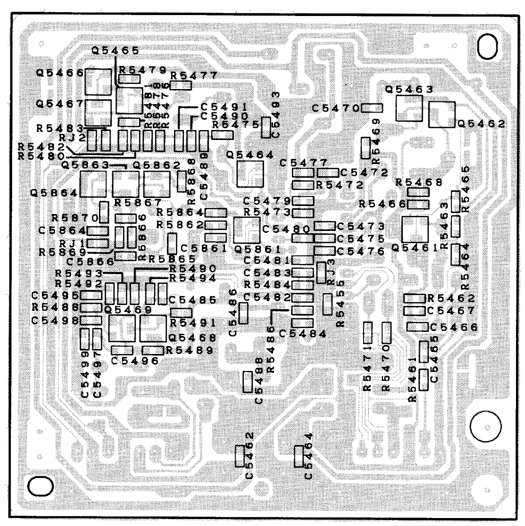
H
G
F
E
D



PWB-C: CRT Unit (Wiring Side)

C
B





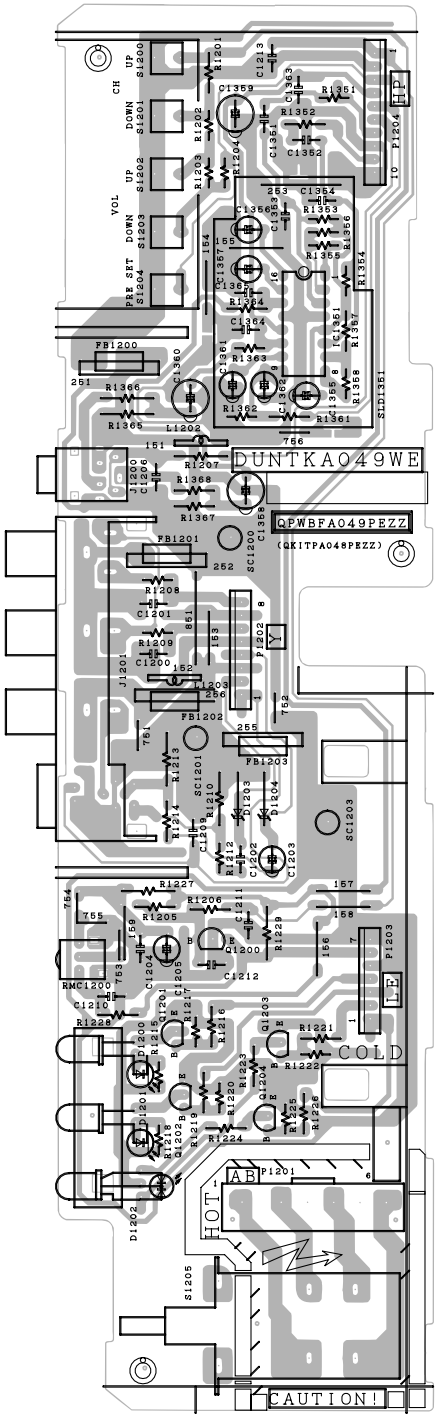
A

(Wiring Side)

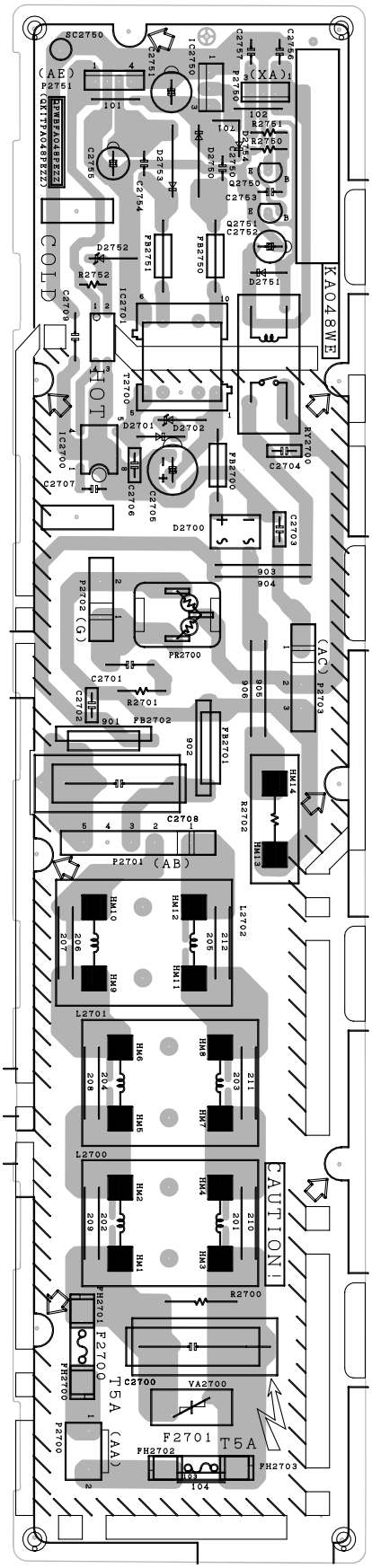
(Chip Parts Side)

PWB-D: DIG COM Unit

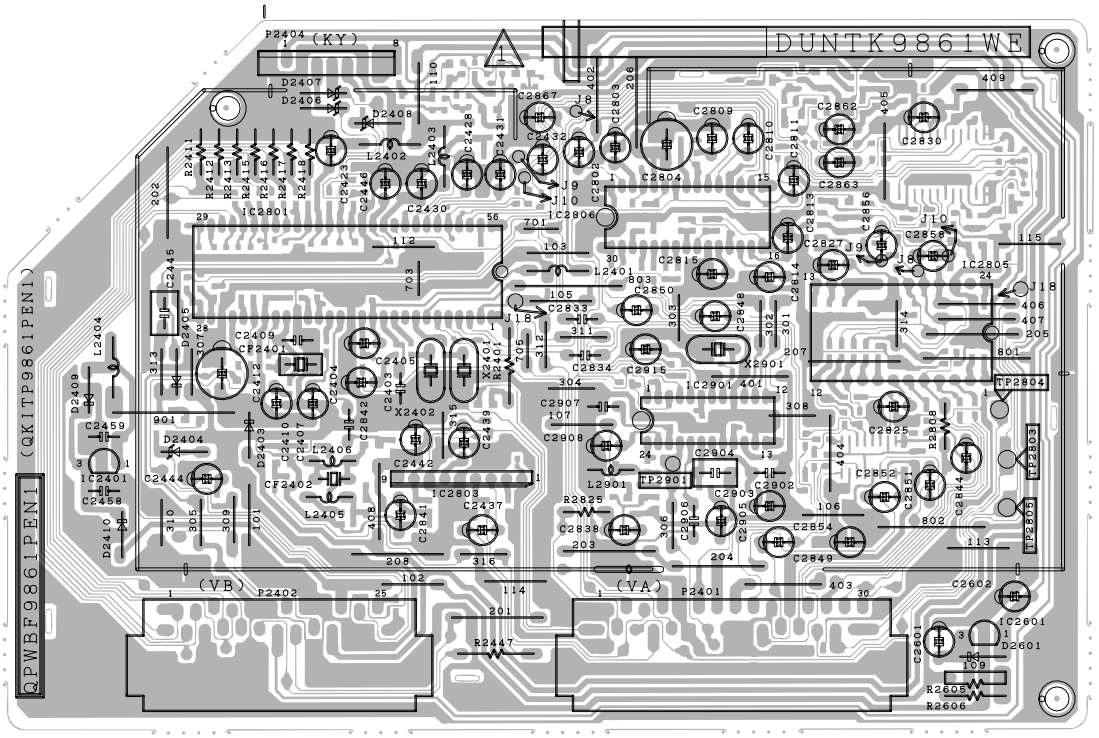
1	2	3	4	5	6



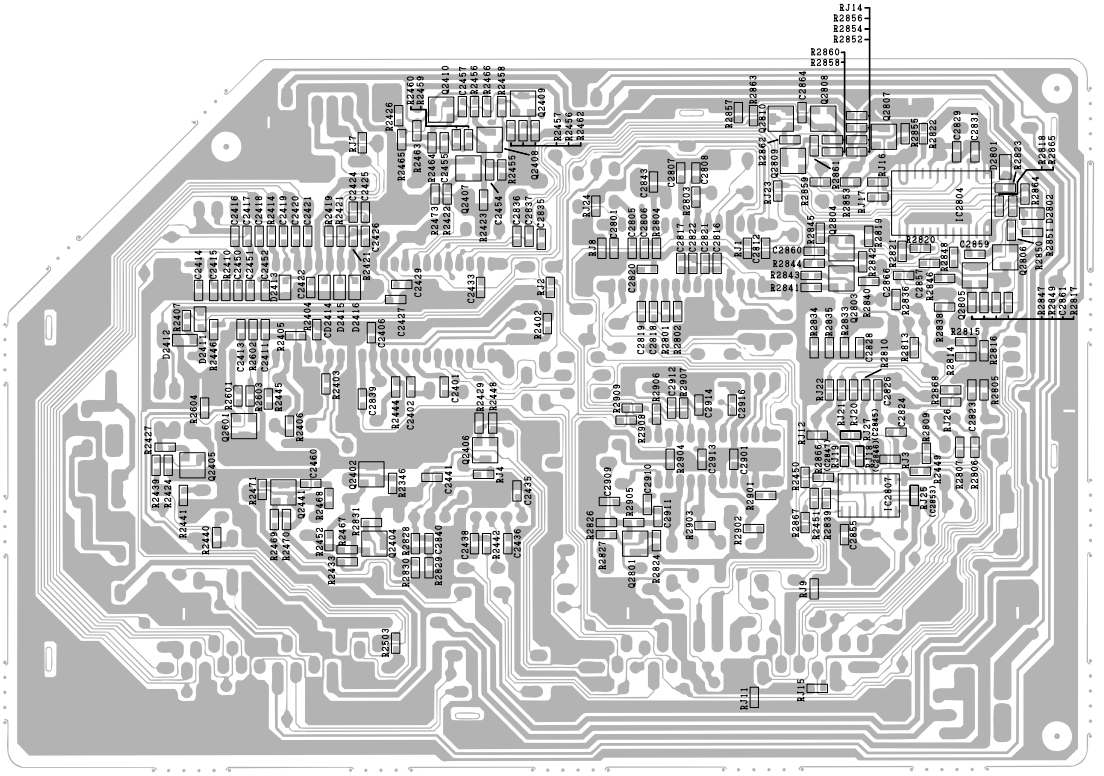
PWB-E: CONTROL Unit (Wiring Side)



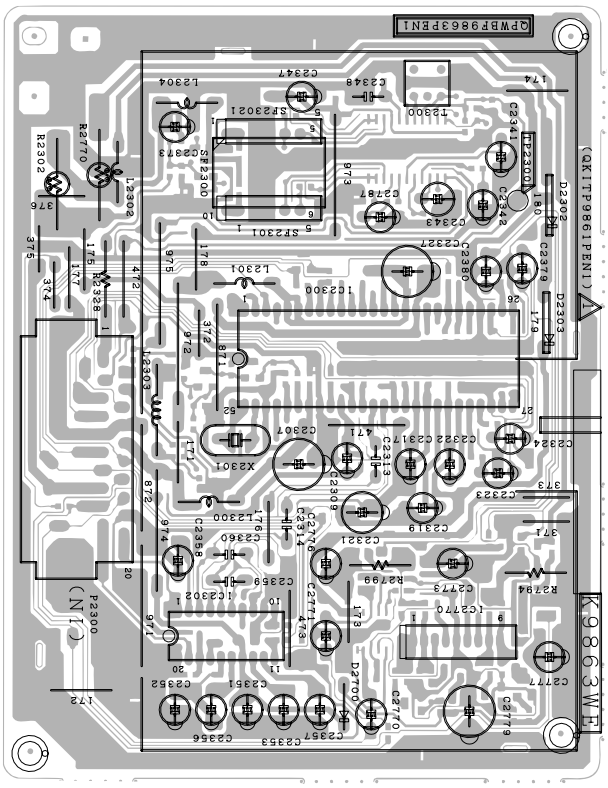
PWB-H: SUB POWER Unit (Wiring Side)



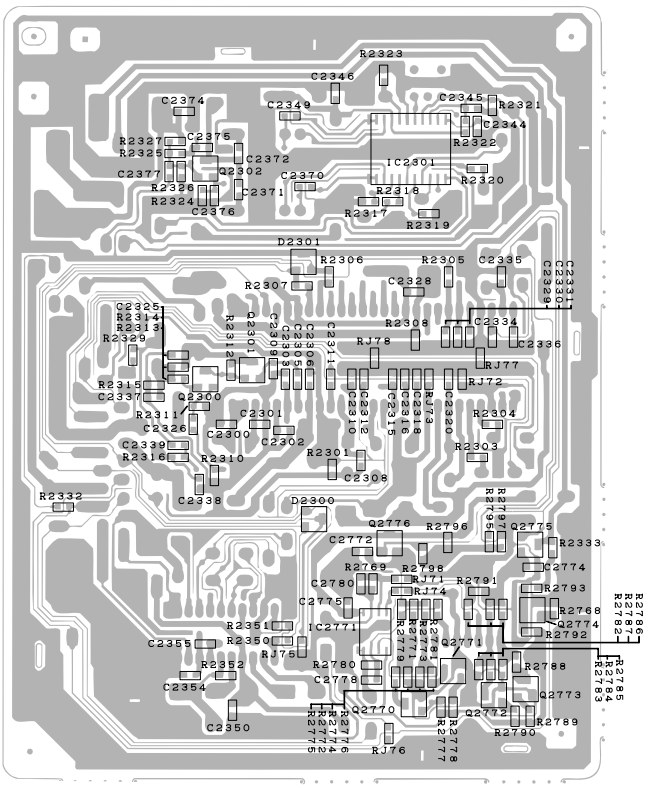
PWB-I: NICAM Unit (Wiring Side)



PWB-I: NICAM Unit (Wiring Side)(Chip Parts)



(Wiring Side)

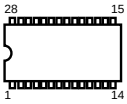


(Wiring Side)(Chip Parts)

PWB-J: VCJ Unit

SOLID STATE DEVICE BASE DIAGRAM

TOP VIEW



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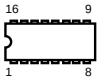

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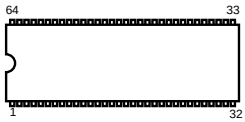
VHiTA8772AN-1



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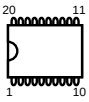

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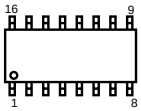
RH-iX0249CEZZ



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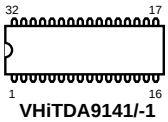

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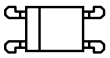

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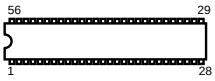

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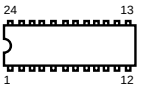

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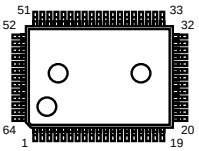
VHiTA1229N/-1



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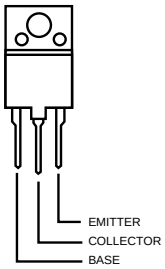
VHiiR9358//-1
VHiM24C08B/-1
VHiBA15218F-1
VHiMiP0253/-1
VHiBA7655A/-1

SIDE VIEW



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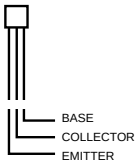
VS2SC5022//1E
VS2SD1830//1E
VS2SD2581//1E
RH-DX0449CEZZ
VS2SA1837//-1



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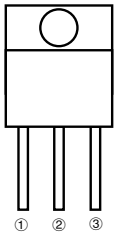
VS2SA1015Y/1E
VS2SC1815GW-1



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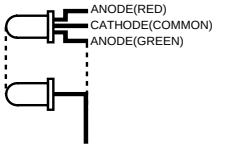
VHiKA7809Pi-1
VHiKA7812Pi-1
VHiSE120N//-1



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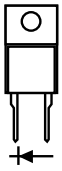

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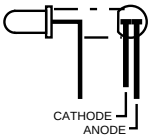
RH-DX0445CEZZ



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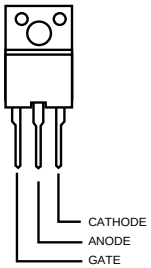

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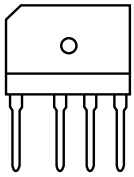

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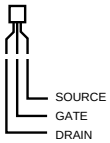

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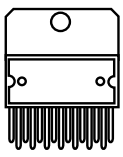

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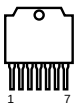

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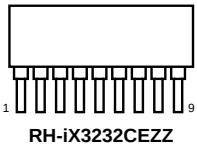

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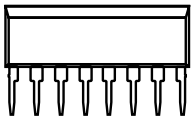
VHiSTRM6821-1



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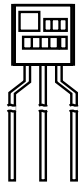

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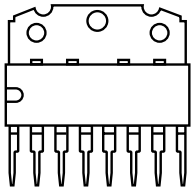

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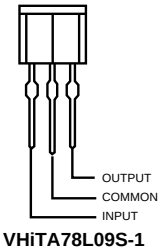


VHiTA78L09S-1

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual: electrical components having such features are identified by "⚠" in the Replacement Parts Lists.
The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION
5. CODE
6. QUANTITY

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code

PICTURE TUBE

⚠	VB68QCP892X1E	R	Picture Tube	
⚠ DY	RCiLH0205PEZZ	R	Deflection Yoke	
⚠ L2799	RCiLG0056PEZZ	J	Degaussing Coil	AS
⚠	QEARC2913PEZZ	J	Grounding Strap	AK
	PMAGF3038CEZZ	R	Purity Magnet	AL
	PMAGG3002CEZZ	R	Magnet	AC
	PSPAG0003PEZZ	J	Wedge	AD

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

PWB-A	DUNTK9859WEX2	–	MAIN Unit	—
PWB-B	DUNTK9860WEV8	–	POWER Unit	—
PWB-C	DUNTK9848WEV1	–	CRT Unit	—
PWB-D	DUNTK9358WEV1	–	DIG. COM. Unit	—
PWB-E	DUNTKA049WEV0	–	CONTROL Unit	—
PWB-H	DUNTKA048WEV1	–	SUB POWER Unit	—
PWB-I	DUNTK9863WEV4	–	NICAM Unit	—
PWB-J	DUNTK9861WEV8	–	VCJ Unit	—

PWB-A DUNTK9859WEX2 MAIN UNIT

TUNER

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

⚠ TU201	VTUVTBT6ED265	R	VHF Tuner	BH

INTEGRATED CIRCUITS

IC402	VHiM52055FP-1	R	M52055FP	AH
IC451	VHiCXA2069Q-1	R	CXA2069Q	AR
IC601	VHiKA7805Pi-1	J	KA7805PI	AE
IC602	VHiKA7805Pi-1	J	KA7805PI	AE
IC605	VHiKA7809Pi-1	J	KA7809PI	AE
IC607	VHiM51497L/-1	R	M51497L	AL
IC1000	RH-iX3285CEN5	R	I.C.	
IC1001	VHiM24C08B/-1	R	M24C08-BN6	AM
IC1002	VHiPST994C/-1	R	PST994C	AD
IC1300	VHiTDA7482/-1	R	TDA7482	AR
IC1301	VHiTDA7482/-1	R	TDA7482	AR

TRANSISTORS

Q200	VS2SB709AR/-1	R	2SB709AR	AC
Q201	VS2SD601AR/-1	R	2SD601AR	AC
Q202	VS2SD601AR/-1	R	2SD601AR	AC
Q203	VS2SB709AR/-1	R	2SB709AR	AC
Q204	VS2SD601AR/-1	R	2SD601AR	AC
Q351	VS2SD601AR/-1	R	2SD601AR	AC
Q352	VS2SD601AR/-1	R	2SD601AR	AC
Q353	VS2SD601AR/-1	R	2SD601AR	AC
Q354	VS2SD601AR/-1	R	2SD601AR	AC
Q406	VS2SB709AR/-1	R	2SB709AR	AC
Q407	VS2SD601AR/-1	R	2SD601AR	AC
Q451	VS2SD601AR/-1	R	2SD601AR	AC
Q452	VS2SD601AR/-1	R	2SD601AR	AC
Q453	VS2SD601AR/-1	R	2SD601AR	AC
Q454	VS2SD601AR/-1	R	2SD601AR	AC
Q501	VS2SD601AR/-1	R	2SD601AR	AC
Q601	VS2SB709AR/-1	R	2SB709AR	AC
Q1001	VS2SD601AR/-1	R	2SD601AR	AC
Q1002	VS2SD601AR/-1	R	2SD601AR	AC
Q1003	VS2SD601AR/-1	R	2SD601AR	AC
Q1004	VS2SK583///-1	R	2SK583	AE
Q1005	VS2SB709AR/-1	R	2SB709AR	AC
Q1007	VS2SD601AR/-1	R	2SD601AR	AC
Q1008	VS2SD601AR/-1	R	2SD601AR	AC
Q1009	VS2SD601AR/-1	R	2SD601AR	AC
Q1012	VS2SD601AR/-1	R	2SD601AR	AC
Q1013	VS2SD601AR/-1	R	2SD601AR	AC
Q1014	VS2SK583///-1	R	2SK583	AE
Q1301	VS2SD601AR/-1	R	2SD601AR	AC
Q1302	VS2SD601AR/-1	R	2SD601AR	AC
Q1303	VS2SB709AR/-1	R	2SB709AR	AC
Q1304	VS2SD601AR/-1	R	2SD601AR	AC
Q1305	VS2SD601AR/-1	R	2SD601AR	AC
Q1306	VS2SB709AR/-1	R	2SB709AR	AC
Q1311	VS2SA1015Y/1E	R	2SA1015(Y)	AC
Q1312	VS2SD601AR/-1	R	2SD601AR	AC
Q1313	VS2SD601AR/-1	R	2SD601AR	AC

DIODES

D201	RH-EX0260TAZZ	R	Zener Diode	AC
D202	RH-EX0260TAZZ	R	Zener Diode	AC
D451	RH-EX0631GEZZ	R	Zener Diode	AA
D452	RH-EX0631GEZZ	R	Zener Diode	AA
D453	RH-EX0631GEZZ	R	Zener Diode	AA
D454	RH-EX0631GEZZ	R	Zener Diode	AA
D455	RH-EX0631GEZZ	R	Zener Diode	AA
D456	RH-EX0631GEZZ	R	Zener Diode	AA
D457	RH-EX0631GEZZ	R	Zener Diode	AA
D458	RH-EX0631GEZZ	R	Zener Diode	AA
D459	RH-EX0631GEZZ	R	Zener Diode	AA
D460	RH-EX0631GEZZ	R	Zener Diode	AA
D461	RH-EX0631GEZZ	R	Zener Diode	AA
D462	RH-EX0631GEZZ	R	Zener Diode	AA
D463	RH-EX0631GEZZ	R	Zener Diode	AA
D464	RH-EX0631GEZZ	R	Zener Diode	AA
D465	RH-EX0631GEZZ	R	Zener Diode	AA
D466	RH-EX0619GEZZ	R	Zener Diode	AA
D467	RH-EX0619GEZZ	R	Zener Diode	AA
D468	RH-EX0260TAZZ	R	Zener Diode	AC
D469	RH-EX0260TAZZ	R	Zener Diode	AC
D601	RH-DX0475CEZZ	R	Diode	AB
D602	RH-DX0475CEZZ	R	Diode	AB
D603	RH-DX0475CEZZ	R	Diode	AB
D604	RH-DX0475CEZZ	R	Diode	AB
D607	RH-DX0475CEZZ	R	Diode	AB
D608	RH-EX0604GEZZ	R	Zener Diode	AB
D609	RH-DX0475CEZZ	R	Diode	AB
D615	RH-EX0623GEZZ	R	Zener Diode	AA
D616	RH-DX0475CEZZ	R	Diode	AB
D1001	RH-DX0475CEZZ	R	Diode	AB
D1003	RH-EX1222CEZZ	R	Zener Diode	AE
D1005	RH-EX1222CEZZ	R	Zener Diode	AE

Ref. No.	Part No.	★	Description	Code
D1007	RH-EX1222CEZZ	R	Zener Diode	AE
D1008	RH-EX1222CEZZ	R	Zener Diode	AE
D1009	RH-EX1222CEZZ	R	Zener Diode	AE
D1012	RH-EX1222CEZZ	R	Zener Diode	AE
D1013	RH-EX1222CEZZ	R	Zener Diode	AE
D1014	RH-EX1222CEZZ	R	Zener Diode	AE
D1016	RH-EX1222CEZZ	R	Zener Diode	AE
D1017	RH-EX1222CEZZ	R	Zener Diode	AE
D1018	RH-EX1222CEZZ	R	Zener Diode	AE
D1019	RH-EX1222CEZZ	R	Zener Diode	AE
D1021	RH-EX1222CEZZ	R	Zener Diode	AE
D1023	RH-EX0619GEZZ	R	Zener Diode	AA
D1024	RH-EX1222CEZZ	R	Zener Diode	AE
D1026	RH-DX0475CEZZ	R	Diode	AB
D1027	RH-EX0260TAZZ	R	Zener Diode	AC
D1028	RH-EX0260TAZZ	R	Zener Diode	AC
D1029	RH-EX0260TAZZ	R	Zener Diode	AC
D1034	RH-EX0260TAZZ	R	Zener Diode	AC
D1035	RH-EX0260TAZZ	R	Zener Diode	AC
D1036	RH-EX0260TAZZ	R	Zener Diode	AC
D1037	RH-EX0260TAZZ	R	Zener Diode	AC
D1038	RH-EX0260TAZZ	R	Zener Diode	AC
D1039	RH-EX0260TAZZ	R	Zener Diode	AC
D1040	RH-EX0260TAZZ	R	Zener Diode	AC
D1041	RH-EX0260TAZZ	R	Zener Diode	AC
D1042	RH-EX0260TAZZ	R	Zener Diode	AC
D1043	RH-EX0260TAZZ	R	Zener Diode	AC
D1044	RH-EX0260TAZZ	R	Zener Diode	AC
D1045	RH-EX0260TAZZ	R	Zener Diode	AC
D1046	RH-EX0260TAZZ	R	Zener Diode	AC
D1049	RH-DX0475CEZZ	R	Diode	AB
D1300	RH-DX0475CEZZ	R	Diode	AB
D1302	RH-DX0475CEZZ	R	Diode	AB
D1304	RH-DX0475CEZZ	R	Diode	AB
D1305	RH-DX0475CEZZ	R	Diode	AB
D1309	RH-EX0619GEZZ	R	Zener Diode	AA
D1310	RH-EX0619GEZZ	R	Zener Diode	AA
D1311	RH-EX0641GEZZ	R	Zener Diode	AA
D1312	RH-EX0616GEZZ	R	Zener Diode	AA
D1313	RH-DX0475CEZZ	R	Diode	AB
D1314	RH-DX0475CEZZ	R	Diode	AB
D1315	RH-DX0475CEZZ	R	Diode	AB
D1316	RH-DX0475CEZZ	R	Diode	AB
D1317	RH-DX0475CEZZ	R	Diode	AB

FILTERS AND COILS

CF601	RFiLA0020CEZZ	R	Ceramic Filter	AD
CF1001	RFiLA0084CEZZ	R	Ceramic Filter	AE
L200	VP-XF390K0000	R	Peaking 39µH	AB
L201	VP-DF270K0000	R	Peaking 27µH	AB
L202	VP-DF270K0000	R	Peaking 27µH	AB
L203	VP-DF270K0000	R	Peaking 27µH	AB
L204	VP-DF100K0000	R	Peaking 10µH	AB
L401	VP-DF100K0000	R	Peaking 10µH	AB
L402	VP-DF100K0000	R	Peaking 10µH	AB
L403	VP-XF181K0000	R	Peaking 180µH	AB
L1002	VP-DF8R2K0000	R	Peaking 8.2µH	AB
L1004	VP-DF1R0K0000	R	Peaking 1µH	AB
L1302	RCiLP0299CEZZ	R	Coil	AF
L1303	RCiLP0299CEZZ	R	Coil	AF
L1304	RCiLP0299CEZZ	R	Coil	AF
L1305	RCiLP0299CEZZ	R	Coil	AF
L1308	RCiLP0362CEZZ	R	Coil	
L1309	RCiLP0362CEZZ	R	Coil	
T1001	RCiLB0029PEZZ	J	Oscillation Coil	AE

CONTROL

R220	RVR-M4620GEZZ	R	1k (B) V-Lebel Adj.	AB

CAPACITORS

C200	VCCCCY1HH270J	R	27p	50V	Ceramic	AA
C201	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C202	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C204	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C206	VCEA0A1CW337M	R	330	16V	Electrolytic	AC
C207	VCEA0A1CW337M	R	330	16V	Electrolytic	AC
C208	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C209	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C210	VCCCCY1HH180J	R	18p	50V	Ceramic	AA
C212	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C215	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C351	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C352	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C353	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C354	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C355	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C356	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C357	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C358	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C363	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C364	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C365	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C366	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C367	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C368	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C369	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C370	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C371	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C372	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C373	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C374	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C383	VCEA0A1HW475M	R	4.7	50V	Electrolytic	AB
C384	VCEA0A1HW475M	R	4.7	50V	Electrolytic	AB
C409	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C410	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C411	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C412	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C413	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C414	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C417	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C418	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C419	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C451	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C452	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C453	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C454	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C455	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C456	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C457	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C458	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C459	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C460	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C461	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C462	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C463	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C465	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C466	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C467	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C468	VCCCCY1HH100D	R	10p	50V	Ceramic	AA
C469	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C470	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C471	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C472	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C473	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C474	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C475	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C476	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C477	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C481	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C482	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C601	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C602	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C603	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C604	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C607	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C608	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C613	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C614	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C615	VCQYTA1HM123K	R	0.012	50V	Mylar	AA
C616	VCEA0A1HW224M	R	0.22	50V	Electrolytic	AB

Ref. No.	Part No.	★			Description	Code
C617	VCKYCY1HB182K	R	1800p	50V	Ceramic	AA
C618	VCKYCY1HB821K	R	820p	50V	Ceramic	AA
C619	VCEA0A1HW224M	R	0.22	50V	Electrolytic	AB
C620	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C1001	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C1002	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C1003	VCEA0A1AW107M	R	100	10V	Electrolytic	AB
C1004	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C1005	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1006	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1007	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1008	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1009	VCEA0A1HW474M	R	0.47	50V	Electrolytic	AB
C1010	VCCCCY1HH221J	R	220p	50V	Ceramic	AA
C1011	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C1012	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1013	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C1014	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C1015	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C1022	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C1033	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1034	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1035	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1036	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C1300	VCFYFA1HA474J	R	0.47	50V	Mylar	AC
C1301	VCFYFA1HA474J	R	0.47	50V	Mylar	AC
C1302	VCKYPA1HB561K	R	560p	50V	Ceramic	AA
C1303	VCKYPA1HB561K	R	560p	50V	Ceramic	AA
C1304	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1305	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1306	VCKYCY1HB472K	R	4700p	50V	Ceramic	AA
C1307	VCKYCY1HB472K	R	4700p	50V	Ceramic	AA
C1308	VCCCCY1HH271J	R	270p	50V	Ceramic	AA
C1309	VCCCCY1HH271J	R	270p	50V	Ceramic	AA
C1310	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1311	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1312	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1313	VCEA0H1VW228M	R	2200	35V	Electrolytic	AH
C1314	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1315	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1316	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1317	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1318	VCEA0A1HW104M	R	0.1	50V	Electrolytic	AB
C1319	VCEA0A1HW104M	R	0.1	50V	Electrolytic	AB
C1320	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C1321	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C1322	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C1323	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C1324	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1325	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C1326	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1327	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1328	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1329	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C1330	VCE9GA1HW225M	R	2.2	50V	Elect. (N.P)	AB
C1331	VCFYFA1HA154J	R	0.15	50V	Mylar	AC
C1332	VCEA0A1CW337M	R	330	16V	Electrolytic	AC
C1333	VCFYFA1HA154J	R	0.15	50V	Mylar	AC
C1336	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC
C1337	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1338	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1345	VCKYCY1HF683Z	R	0.068	50V	Ceramic	AB
C1346	VCKYCY1HF683Z	R	0.068	50V	Ceramic	AB
C1349	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA
C1350	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA
C1375	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA
C1376	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA
C1377	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA
C1378	VCKYCY1HF473Z	R	0.047	50V	Ceramic	AA

RESISTORS

RJ1	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ13	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ14	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ15	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ16	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ17	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ19	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ21	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ22	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ23	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ24	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ27	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ28	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ29	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ30	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ32	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ33	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ34	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ38	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ40	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ41	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ42	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ43	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ46	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ47	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ48	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R200	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R202	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R203	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R204	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R205	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R206	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R207	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R208	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R209	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R210	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R211	VRS-CY1JF331J	R	330	1/16W	Metal Oxide	AA
R212	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R213	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R214	VRS-CY1JF680J	R	68	1/16W	Metal Oxide	AA
R215	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R216	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R217	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R218	VRD-RA2BE473J	R	47k	1/8W	Carbon	AA
R219	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R351	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R352	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R353	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R354	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R355	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R356	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R357	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R358	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R361	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R362	VRD-RA2EE102J	R	1.0k	1/4W	Carbon	AA
R364	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R365	VRD-RA2EE102J	R	1.0k	1/4W	Carbon	AA
R367	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R368	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R369	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R370	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R371	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R372	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R373	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R374	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R375	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R376	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R377	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R378	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R379	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R380	VRS-CY1JF564J	R	560k	1/16W	Metal Oxide	AA
R381	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R382	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R383	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R384	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R385	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R386	VRS-CY1JF104J	R	100k	1/16W	Metal Oxide	AA
R387	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R388	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R389	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R390	VRS-CY1JF473J	R	47k 1/16W Metal Oxide	AA
R391	VRS-CY1JF564J	R	560k 1/16W Metal Oxide	AA
R392	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R393	VRS-CY1JF564J	R	560k 1/16W Metal Oxide	AA
R394	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R408	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R413	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R414	VRS-CY1JF123J	R	12k 1/16W Metal Oxide	AA
R416	VRS-CY1JF123J	R	12k 1/16W Metal Oxide	AA
R421	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R422	VRD-RA2BE473J	R	47k 1/8W Carbon	AA
R451	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R452	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R453	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R454	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R455	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R456	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R457	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R458	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R459	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R461	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R462	VRD-RM2HD221J	R	220 1/2W Carbon	AA
R464	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R465	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R467	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R468	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R469	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R470	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R471	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R472	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R473	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R474	VRD-RA2EE750J	R	75 1/4W Carbon	AA
R475	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R476	VRD-RA2EE390J	R	39 1/4W Carbon	AA
R477	VRD-RA2EE750J	R	75 1/4W Carbon	AA
R478	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R479	VRD-RA2EE750J	R	75 1/4W Carbon	AA
R480	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R481	VRD-RA2EE750J	R	75 1/4W Carbon	AA
R482	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R483	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R484	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R485	VRD-RA2EE750J	R	75 1/4W Carbon	AA
R486	VRD-RA2BE330J	R	33 1/8W Carbon	AA
R488	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R489	VRD-RA2EE750J	R	75 1/4W Carbon	AA
⚠ R494	RR-XZ0026CEZZ	R	10 1/4W Fuse Resistor	AB
R495	VRS-CY1JF152J	R	1.5k 1/16W Metal Oxide	AA
R496	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R497	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R498	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R501	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R502	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R503	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R601	VRN-VV3DB4R7J	R	4.7 2W Metal Film	AB
R602	VRD-RM2HD101J	R	100 1/2W Carbon	AA
R603	VRD-RM2HD101J	R	100 1/2W Carbon	AA
R604	VRN-VV3AB6R8J	R	6.8 1W Metal Film	AA
R608	VRN-VV3DB8R2J	R	8.2 2W Metal Film	AB
R609	VRD-RM2HD470J	R	47 1/2W Carbon	AA
R610	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R618	VRS-CY1JF684J	R	680k 1/16W Metal Oxide	AA
R619	VRS-CY1JF682J	R	6.8k 1/16W Metal Oxide	AA
R620	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R621	VRS-CY1JF271J	R	270 1/16W Metal Oxide	AA
R622	VRS-CY1JF471J	R	470 1/16W Metal Oxide	AA
R623	VRS-CY1JF184J	R	180k 1/16W Metal Oxide	AA
R624	VRD-RA2EE471J	R	470 1/4W Carbon	AA
R625	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R626	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R627	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R628	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R629	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1001	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1002	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1003	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1004	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1005	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1006	VRS-CY1JF472J	R	4.7k 1/16W Metal Oxide	AA
R1007	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1008	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1011	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1013	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1014	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1016	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R1017	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R1019	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1020	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1021	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1024	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1025	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1026	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1027	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1028	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1029	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1030	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1031	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1032	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1033	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1034	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1036	VRS-CY1JF000J	R	00 1/16W Metal Oxide	AA
R1038	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R1041	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1042	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1043	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1044	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1045	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1046	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1049	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1051	VRD-RA2BE562J	R	5.6k 1/8W Carbon	AA
R1052	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1053	VRS-CY1JF392J	R	3.9k 1/16W Metal Oxide	AA
R1054	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1055	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R1056	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1057	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1058	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1061	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1062	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1063	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1064	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1065	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1067	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1069	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1070	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1071	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1072	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1073	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1074	VRS-CY1JF332J	R	3.3k 1/16W Metal Oxide	AA
R1075	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1076	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1077	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1078	VRD-RA2BE471J	R	470 1/8W Carbon	AA
R1079	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1080	VRS-CY1JF332J	R	3.3k 1/16W Metal Oxide	AA
R1081	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1086	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1087	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1088	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1089	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1091	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1092	VRS-CY1JF222J	R	2.2k 1/16W Metal Oxide	AA
R1093	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1094	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1095	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1096	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1100	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1101	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1102	VRS-CY1JF393J	R	39k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
R1103	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1106	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1107	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1108	VRS-CY1JF393J	R	39k 1/16W Metal Oxide	AA
R1109	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1110	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1111	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1112	VRD-RA2BE272J	R	2.7k 1/8W Carbon	AA
R1113	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1114	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R1118	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1120	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1125	VRS-CY1JF473J	R	47k 1/16W Metal Oxide	AA
R1126	VRS-CY1JF473J	R	47k 1/16W Metal Oxide	AA
R1127	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1129	VRS-CY1JF563J	R	56k 1/16W Metal Oxide	AA
R1133	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1134	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1137	VRS-CY1JF471J	R	470 1/16W Metal Oxide	AA
R1138	VRD-RA2BE471J	R	470 1/8W Carbon	AA
R1139	VRS-CY1JF562J	R	5.6k 1/16W Metal Oxide	AA
R1306	VRS-CY1JF123J	R	12k 1/16W Metal Oxide	AA
R1307	VRS-CY1JF123J	R	12k 1/16W Metal Oxide	AA
R1308	VRS-CY1JF272J	R	2.7k 1/16W Metal Oxide	AA
R1309	VRS-CY1JF272J	R	2.7k 1/16W Metal Oxide	AA
R1310	VRS-CY1JF391J	R	390 1/16W Metal Oxide	AA
R1311	VRS-CY1JF391J	R	390 1/16W Metal Oxide	AA
R1312	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1313	VRS-CY1JF102J	R	1.0k 1/16W Metal Oxide	AA
R1314	VRD-RA2BE332J	R	3.3k 1/8W Carbon	AA
R1315	VRS-CY1JF332J	R	3.3k 1/16W Metal Oxide	AA
R1316	VRD-RM2HD151J	R	150 1/2W Carbon	AA
R1317	VRD-RM2HD151J	R	150 1/2W Carbon	AA
R1318	VRS-CY1JF223J	R	22k 1/16W Metal Oxide	AA
R1319	VRD-RA2BE104J	R	100k 1/8W Carbon	AA
R1320	VRS-CY1JF104J	R	100k 1/16W Metal Oxide	AA
R1321	VRS-CY1JF101J	R	100 1/16W Metal Oxide	AA
R1325	VRS-CY1JF183J	R	18k 1/16W Metal Oxide	AA
R1327	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1328	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1329	VRD-RM2HD102J	R	1.0k 1/2W Carbon	AA
R1330	VRD-RM2HD102J	R	1.0k 1/2W Carbon	AA
R1331	VRS-VV3AB221J	R	220 1W Metal Oxide	AA
R1332	VRS-VV3AB221J	R	220 1W Metal Oxide	AA
R1333	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1345	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1346	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1347	VRS-KT3LB221J	R	220 3.0W Metal Oxide	AE
R1348	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1349	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1350	VRS-CY1JF333J	R	33k 1/16W Metal Oxide	AA
R1375	VRS-CY1JF273J	R	27k 1/16W Metal Oxide	AA
R1376	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA
R1377	VRS-CY1JF103J	R	10k 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

J451	QTANJ0967CEZZ	R	AV Terminal	AP
J452	QTANJ0527CEZZ	R	Terminal, DVD-IN	AL
P301	QPLGN0361CEZZ	R	Plug, 3-pin (SR)	AB
P400	QPLGN0861CEZZ	R	Plug, 8-pin (Y)	AC
P1000	QPLGN0661CEZZ	R	Plug, 6-pin (BC)	AD
P1001	QPLGN0761CEZZ	R	Plug, 7-pin (LE)	AD
P1003	QPLGN0361CEZZ	R	Plug, 3-pin (XA)	AB
P1005	QPLGN1061CEZZ	R	Plug, 10-pin (HP)	AC
P1301	QPLGN0861CEZZ	R	Plug, 8-pin (SS)	AC
P1302	QPLGN0361CEZZ	R	Plug, 3-pin (SI)	AB
P1304	QPLGN0361CEZZ	R	Plug, 3-pin (SR)	AB
SC301	QSOCN0284FJZZ	R	Socket, 20-pin (NI)	AK
SC401	QSOCN0785CEZZ	R	Socket, 7-pin (YA)	AC
SC402	QSOCN0785CEZZ	R	Socket, 7-pin (YB)	AC
SC404	QSOCZ3061CEZZ	R	Socket, 30-pin (VA)	AH
SC405	QSOCN0285FJZZ	R	Socket, 25-pin (VB)	AG
SC451	QSOCD0427CEZZ	R	Socket, S-Video	AL
SC602	QSOCZ1040CEZZ	R	Socket, 10-pin (XB)	AD
SC603	QSOCZ1040CEZZ	R	Socket, 10-pin (XD)	AD

Ref. No.	Part No.	★	Description	Code
SC1001	QSOCZ1040CEZZ	R	Socket, 10-pin (XC)	AD
SLD1001	PSLDM0211PEFW	J	Shield	AG
RDA601	PRDAR0160PEFW	J	Heat Sink, for IC601	AF
RDA1301	PRDAR0265PEFW	J	Heat Sink, for IC1300 / IC1301	AD
	LX-BZ3100CEFD	R	Screw	AA

PWB-B DUNTK9860WEV8 POWER UNIT

INTEGRATED CIRCUITS

IC1500	VHiTA1241AN-1	R	TA1241AN	AM
IC1501	VHiTA8427K/-1	R	TA8427k	AL
IC1680	VHiiR9358//-1	R	IR9358	AD
⚠ IC1701	RH-FX0008GEZZ	R	PC123FY8	AE
IC1702	VHiSTRM6821-1	R	STRM6821A	AZ
IC1752	VHiSE120N//-1	R	SE120N	AG
IC1753	VHiKA7809Pi-1	J	KA7809PI	AE
IC1754	VHiKA7812Pi-1	J	KA7812PI	AE
IC1757	RH-iX0249CEZZ	R	I.C.	AE

TRANSISTORS

Q1500	VS2SC1815GW-1	R	2SC1815GW	AB
⚠ Q1604	VS2SC1815GW-1	R	2SC1815GW	AB
Q1622	VS2SC3207//-1	R	2SC3207	AC
⚠ Q1630	VS2SD2581//1E	R	2SD2581	AL
Q1670	VS2SA1246//1E	R	2SA1246	AE
Q1671	VS2SD1830//1E	R	2SD1830	AF
Q1680	VS2SC5022//1E	R	2SC5022	AG
Q1681	VS2SC3198-Y-1	R	2SC3198(Y)	AA
Q1700	VS2SC1815GW-1	R	2SC1815GW	AB
Q1750	VS2SC1815GW-1	R	2SC1815GW	AB

DIODES

D1500	RH-EX0619GEZZ	R	Zener Diode	AA
D1501	RH-EX0619GEZZ	R	Zener Diode	AA
D1503	RH-EX0619GEZZ	R	Zener Diode	AA
D1505	RH-EX0619GEZZ	R	Zener Diode	AA
D1506	RH-DX0279CEZZ	R	Diode	AB
D1576	RH-DX0127CEZZ	R	Diode	AC
D1607	RH-DX0475CEZZ	R	Diode	AB
D1610	RH-DX0202CEZZ	R	Diode	AD
⚠ D1620	RH-DX0475CEZZ	R	Diode	AB
⚠ D1621	RH-EX0655GEZZ	R	Zener Diode	AB
D1631	RH-DX0449CEZZ	R	Diode	AK
D1651	RH-DX0302CEZZ	R	Diode	AC
D1657	RH-DX0127CEZZ	R	Diode	AC
D1659	RH-DX0487CEZZ	R	Diode	AC
D1664	RH-EX0630GEZZ	R	Zener Diode	AA
D1680	RH-DX0484CEZZ	R	Diode	AE
D1681	RH-DX0475CEZZ	R	Diode	AB
D1682	RH-DX0475CEZZ	R	Diode	AB
D1683	RH-DX0475CEZZ	R	Diode	AB
D1684	RH-DX0475CEZZ	R	Diode	AB
D1700	RH-DX0336CEZZ	R	Diode	AH
D1701	RH-DX0321CEZZ	R	Diode	AC
D1702	RH-DX0130CEZZ	R	Diode	AE
D1703	RH-DX0130CEZZ	R	Diode	AE
D1704	VHSTF861S//-1	R	Si.Control Rectifier	AK
D1705	RH-DX0130CEZZ	R	Diode	AE
D1750	RH-DX0243CEZZ	R	Diode	AF
D1751	RH-DX0243CEZZ	R	Diode	AF
D1752	RH-DX0445CEZZ	R	Diode	AL
D1753	RH-DX0473CEZZ	R	Diode	AK
D1755	RH-DX0475CEZZ	R	Diode	AB
D1756	RH-DX0452CEZZ	R	Diode	AH
D1758	RH-EX0152CEZZ	R	Zener Diode	AE
D1759	RH-EX0611GEZZ	R	Zener Diode	AA
D1760	RH-DX0475CEZZ	R	Diode	AB
D1761	RH-DX0475CEZZ	R	Diode	AB
D1764	RH-DX0475CEZZ	R	Diode	AB
D1765	RH-DX0475CEZZ	R	Diode	AB

Ref. No.	Part No.	★	Description	Code
COILS				
L1500	VP-CF331K0000	R	Peaking 330µH	AB
L1640	RCiLZ0982CEZZ	R	Coil	AK
L1641	RCiLZ1034CEZZ	R	Coil	AM
L1670	RCiLZ1005CEZZ	R	Coil	AH
L1680	RCiLZ0976CEZZ	R	Coil	AK
L1681	VP-XF8R2K0000	R	Peaking 8.2µH	AB
L1750	RCiLP0292CEZZ	R	Coil	AE
L1751	RCiLP0292CEZZ	R	Coil	AE
L1752	RCiLP0268CEZZ	R	Coil	AE
L1753	RCiLP0268CEZZ	R	Coil	AE
L1754	RCiLP0268CEZZ	R	Coil	AE
TRANSFORMERS				
⚠ T1602	RTRNF2032CEZZ	R	H-Volt Transformer	BG
⚠ T1620	RTRNZ0731CEZZ	R	Transformer	AG
T1680	RTRNZ0726CEZZ	R	Transformer	AM
⚠ T1700	RTRNZ0163PEZZ	J	Transformer	AX
CONTROL				
R1633	RVR-M4634GEZZ	R	220k Sub-Cont. Adj.	AB
CAPACITORS				
C1500	VCCSPA1HL221J	R	220p 50V Ceramic	AA
C1501	VCQYTA1HM223J	R	0.022 50V Mylar	AA
C1502	VCEACA1HC225M	R	2.2 50V Electrolytic	AC
C1503	VCFYFA1HA474J	R	0.47 50V Mylar	AC
C1506	VCEA0A1CW108M	R	1000 16V Electrolytic	AD
C1507	VCKYPA1HF103Z	R	0.01 50V Ceramic	AA
C1508	VCKYPA1HB102K	R	1000p 50V Ceramic	AA
C1510	VCEA0A1HW105M	R	1.0 50V Electrolytic	AB
C1511	VCEA0A1HW107M	R	100 50V Electrolytic	AB
C1512	VCQYTA1HM823J	R	0.082 50V Mylar	AA
C1513	VCKYPA2HB391K	R	390p 500V Ceramic	AA
C1514	VCQYTA1HM682J	R	6800p 50V Mylar	AB
C1515	VCFYAA2AA224J	R	0.22 100V Mylar	AD
C1516	VCQYTA1HM103J	R	0.01 50V Mylar	AA
C1518	VCEA0A1VW108M	R	1000 35V Electrolytic	AD
C1519	VCEACA1HC105M	R	1.0 50V Electrolytic	AC
C1520	VCEA0A1VW108M	R	1000 35V Electrolytic	AD
C1521	VCKYPA1HF103Z	R	0.01 50V Ceramic	AA
C1525	VCKYPA1HB391K	R	390p 50V Ceramic	AA
C1526	VCKYPA1HB391K	R	390p 50V Ceramic	AA
C1572	VCEA0H1VW228M	R	2200 35V Electrolytic	AH
C1575	RC-QZ0037CEZZ	R	0.01 100V Mylar	AB
C1576	VCKYPA2HB102K	R	1000p 500V Ceramic	AA
C1610	VCFYSB2EB224K	R	0.22 250V Mylar	AD
⚠ C1619	VCKYPA1HF103Z	R	0.01 50V Ceramic	AA
C1623	VCFPVC2DB474J	R	0.47 200V Polypro Film	AE
C1625	VCKYPA2HB561K	R	560p 500V Ceramic	AA
C1627	VCKYPA1HB102K	R	1000p 50V Ceramic	AA
C1628	VCFYSB2EB223K	R	0.022 250V Mylar	AC
⚠ C1632	VCFPVC3CA103H	R	0.01 1.6kV Polypro Film	AE
⚠ C1633	VCFPVC3CA912H	R	9100p 1.6kV Polypro Film	AE
⚠ C1635	VCQPPC2JB223J	R	0.022 630V Mylar	AC
⚠ C1636	VCQPPC2JB223J	R	0.022 630V Mylar	AC
C1638	VCKYPA1HB472K	R	4700p 50V Ceramic	AA
C1639	RC-KZ0033CEZZ	R	150p 2kV Ceramic	AB
C1640	VCFYFA1HA474J	R	0.47 50V Mylar	AC
C1644	RC-FZ0364CEZZ	R	0.62 250V Mylar	AF
C1651	VCKYPA2HB102K	R	1000p 500V Ceramic	AA
C1652	VCEA0A2EW106M	R	10 250V Electrolytic	AD
C1655	VCKYPA2HB331K	R	330p 500V Ceramic	AA
C1657	VCKYPA2HB102K	R	1000p 500V Ceramic	AA
C1658	VCEA0A1EW108M	R	1000 25V Electrolytic	AD
C1659	VCEA0A1VW107M	R	100 35V Electrolytic	AC
C1670	RC-FZ0374CEZZ	R	4.7 100V Mylar	AF
C1680	VCFPVC3CA822H	R	8200p 1.6kV Polypro Film	AE
C1681	RC-KZ0024CEZZ	R	1000p 2kV Ceramic	AC
C1682	RC-KZ0340CEZZ	R	1000p 2kV Ceramic	AD
C1683	VCE9GA1HW335M	R	3.3 50V Elect. (N.P)	AB
C1684	VCEA0A1VW106M	R	10 35V Electrolytic	AB
C1695	VCFYFA1HA224J	R	0.22 50V Mylar	AB
C1696	VCQYTA1HM103J	R	0.01 50V Mylar	AA
C1702	RC-EZ0689CEZZ	R	680 400V Electrolytic	BA
C1703	VCQPSC2JA333K	R	0.033 630V Mylar	AB
C1704	RC-KZ0334CEZZ	R	270p 2kV Ceramic	AC
C1705	RC-KZ0024CEZZ	R	1000p 2kV Ceramic	AC
C1706	VCEA0A1HW107M	R	100 50V Electrolytic	AB
C1707	VCKYPA1HB101K	R	100p 50V Ceramic	AA
C1708	VCKYPA1HF103Z	R	0.01 50V Ceramic	AA
C1709	VCKYPA1HB471K	R	470p 50V Ceramic	AA
⚠ C1710	RC-KZ020SCEZZ	R	2200p 4kV Ceramic	AE
C1711	VCQYTA1HM103J	R	0.01 50V Mylar	AA
C1712	VCE9GA1HW105M	R	1.0 50V Elect. (N.P)	AB
C1714	VCQYTA1HM223J	R	0.022 50V Mylar	AA
C1750	VCKYPA2HB471K	R	470p 500V Ceramic	AA
C1751	VCKYPA2HB471K	R	470p 500V Ceramic	AA
C1752	VCKYPA2HB471K	R	470p 500V Ceramic	AA
C1753	VCKYPA2HB471K	R	470p 500V Ceramic	AA
C1754	VCKYPA2HB471K	R	470p 500V Ceramic	AA
C1755	RC-EZ0004PEZZ	J	2200 35V Electrolytic	AH
C1756	RC-EZ0004PEZZ	J	2200 35V Electrolytic	AH
C1757	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
C1758	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
C1759	RC-EZ0006PEZZ	J	220 160V Electrolytic	AK
C1760	RC-EZ0006PEZZ	J	220 160V Electrolytic	AK
C1763	RC-KZ0029CEZZ	R	0.01 250V Ceramic	AC
C1764	RC-EZ0004PEZZ	J	2200 35V Electrolytic	AH
C1765	RC-EZ0004PEZZ	J	2200 35V Electrolytic	AH
C1766	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
C1767	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
C1768	RC-EZ0006PEZZ	J	220 160V Electrolytic	AK
C1769	RC-KZ0029CEZZ	R	0.01 250V Ceramic	AC
C1770	RC-KZ0335CEZZ	R	330p 2kV Ceramic	AD
C1771	VCEA0A1HW106M	R	10 50V Electrolytic	AB
C1772	VCKYPA2HB101K	R	100p 500V Ceramic	AA
C1773	VCKYPA1HB101K	R	100p 50V Ceramic	AA
C1774	VCEA0A1EW227M	R	220 25V Electrolytic	AB
C1775	VCEA0A1CW227M	R	220 16V Electrolytic	AC
C1776	VCEA0A1EW337M	R	330 25V Electrolytic	AC
C1777	VCEA0A1CW337M	R	330 16V Electrolytic	AC
C1782	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
C1783	RC-EZ0002PEZZ	J	1000 25V Electrolytic	AE
RESISTORS				
R1500	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1501	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1504	VRD-RA2BE221J	R	220 1/8W Carbon	AA
R1505	VRD-RA2BE183J	R	18k 1/8W Carbon	AA
R1506	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1508	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1510	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1511	VRD-RA2BE104J	R	100k 1/8W Carbon	AA
R1512	VRD-RA2BE563J	R	56k 1/8W Carbon	AA
R1513	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1514	VRD-RA2BE124J	R	120k 1/8W Carbon	AA
R1515	VRD-RA2BE154J	R	150k 1/8W Carbon	AA
R1516	VRD-RA2BE154J	R	150k 1/8W Carbon	AA
R1517	VRD-RA2EE125J	R	1.2M 1/4W Carbon	AA
R1520	VRD-RA2BE183J	R	18k 1/8W Carbon	AA
R1521	VRD-RA2BE101J	R	100 1/8W Carbon	AB
⚠ R1522	VRG-RL2HB220J	R	22 1/2W Fuse Resistor	AB
R1523	VRD-RA2BE124J	R	120k 1/8W Carbon	AA
R1524	VRD-RA2BE683J	R	68k 1/8W Carbon	AA
R1525	VRD-RA2BE274J	R	270k 1/8W Carbon	AA
R1526	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1527	VRS-VV3AB391J	R	390 1W Metal Oxide	AA
R1528	VRD-RM2HD391J	R	390 1/2W Carbon	AA
R1529	VRD-RM2HD391J	R	390 1/2W Carbon	AA
R1530	VRD-RM2HD123J	R	12k 1/2W Carbon	AA
R1531	VRD-RM2HD2R7J	R	2.7 1/2W Carbon	AA
R1532	VRD-RM2HD2R7J	R	2.7 1/2W Carbon	AA
R1533	VRD-RM2HD2R7J	R	2.7 1/2W Carbon	AA
R1556	VRD-RA2BE394J	R	390k 1/8W Carbon	AA
R1557	VRD-RA2BE273J	R	27k 1/8W Carbon	AA
R1558	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1559	VRD-RA2BE102J	R	1.0k 1/8W Carbon	AA
R1574	VRS-VV3DB151J	R	150 2W Metal Oxide	AA
R1576	VRN-VV3AB1R0J	R	1.0 1W Metal Film	AA

Ref. No.	Part No.	★			Description	Code
R1610	VRS-VV3DB103J	R	10k	2W	Metal Oxide	AA
⚠ R1617	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
⚠ R1618	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
⚠ R1619	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
⚠ R1620	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1621	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1622	VRS-SU2HB102J	R	1.0k	1/2W	Metal Oxide	AA
R1623	VRD-RM2HD393J	R	39k	1/2W	Carbon	AA
R1624	VRW-KQ3HC122J	R	1.2k	5W	Cement	AE
R1625	VRS-VV3AB562J	R	5.6k	1W	Metal Oxide	AA
R1626	VRD-RA2BE561J	R	560	1/8W	Carbon	AA
R1627	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1629	VRW-KQ41C3R3K	R	3.3	15W	Cement	AG
R1630	VRD-RA2EE684J	R	680k	1/4W	Carbon	AA
R1631	VRD-RA2EE124J	R	120k	1/4W	Carbon	AA
R1632	VRD-RM2HD103J	R	10k	1/2W	Carbon	AA
R1634	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1637	VRD-RA2EE154J	R	150k	1/4W	Carbon	AA
R1638	VRD-RM2HD150J	R	15	1/2W	Carbon	AA
R1639	VRD-RM2HD393J	R	39k	1/2W	Carbon	AA
R1647	VRS-KT3LB122J	R	1.2k	3.0W	Metal Oxide	AC
⚠ R1651	RR-XZ0029CEZZ	R	3.3	1/2W	Fuse Resistor	AB
R1654	VRD-RM2HD392J	R	3.9k	1/2W	Carbon	AA
R1655	VRD-RM2HD102J	R	1.0k	1/2W	Carbon	AA
R1657	VRN-VV3ABR22J	R	0.22	1W	Metal Film	AA
R1659	VRN-VV3DBR82J	R	0.82	2W	Metal Film	AB
R1660	VRD-RM2HD101J	R	100	1/2W	Carbon	AA
R1661	VRD-RM2HD101J	R	100	1/2W	Carbon	AA
R1662	VRD-RM2HD103J	R	10k	1/2W	Carbon	AA
R1670	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1671	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1672	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1673	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1674	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R1675	VRN-VV3DBR33J	R	0.33	2W	Metal Film	AA
R1680	VRS-SV3LB154J	R	150k	3.0W	Metal Oxide	AC
R1681	VRS-VV3LB104J	R	100k	3.0W	Metal Oxide	AB
R1682	VRC-MA2HG333K	R	33k	1/2W	Solid	AA
R1683	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R1684	VRD-RA2BE681J	R	680	1/8W	Carbon	AA
R1685	VRS-VV3AB181J	R	180	1W	Metal Oxide	AA
R1686	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1687	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1688	VRD-RA2BE473J	R	47k	1/8W	Carbon	AA
R1689	VRD-RA2BE823J	R	82k	1/8W	Carbon	AA
R1690	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1691	VRD-RA2BE823J	R	82k	1/8W	Carbon	AA
R1695	VRD-RA2BE224J	R	220k	1/8W	Carbon	AA
R1696	VRD-RA2BE474J	R	470k	1/8W	Carbon	AA
R1702	VRW-KQ41CR82K	R	0.82	15W	Cement	AF
R1703	VRW-KQ4AC2R2K	R	2.2	10W	Cement	AF
R1704	VRS-KT3LB682J	R	6.8k	3.0W	Metal Oxide	AC
R1705	VRS-KT3LB822J	R	8.2k	3.0W	Metal Oxide	AC
R1706	VRS-KT3LB823J	R	82k	3.0W	Metal Oxide	AC
R1707	VRS-VV3DB100J	R	10	2W	Metal Oxide	AA
R1708	VRD-RM2HD332J	R	3.3k	1/2W	Carbon	AA
R1709	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R1710	RR-WZ0140CEZZ	R	0.22	3W	Cement	AC
R1711	RR-WZ0170CEZZ	R	0.18	3W	Cement	AE
R1712	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R1713	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1714	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
⚠ R1715	VRC-UA2HG825K	R	8.2M	1/2W	Solid	AA
⚠ R1716	VRC-UA2HG825K	R	8.2M	1/2W	Solid	AA
R1717	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1718	VRS-VV3AB560J	R	56	1W	Metal Oxide	AA
R1750	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1751	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1752	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1753	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1754	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1755	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1756	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1757	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1758	VRN-VV3DB6R8J	R	6.8	2W	Metal Film	AB
R1759	VRS-VV3DB270J	R	27	2W	Metal Oxide	AA
R1762	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1764	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1765	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R1766	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R1767	VRD-RA2BE682J	R	6.8k	1/8W	Carbon	AA
R1768	VRS-VV3DB123J	R	12k	2W	Metal Oxide	AA
R1769	VRD-RM2HD182J	R	1.8k	1/2W	Carbon	AA
R1770	VRD-RM2HD182J	R	1.8k	1/2W	Carbon	AA
R1771	VRD-RM2HD182J	R	1.8k	1/2W	Carbon	AA
R1772	VRD-RM2HD182J	R	1.8k	1/2W	Carbon	AA

MISCELLANEOUS PARTS

FB1500	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1630	RBLN-0047CEZZ	R	Ferrite Bead	AB
FB1631	RBLN-0047CEZZ	R	Ferrite Bead	AB
FB1700	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1701	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1750	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1751	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1752	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1753	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1754	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1755	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1756	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1757	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1758	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB1759	RBLN-0037CEZZ	R	Ferrite Bead	AB
P1500	QPLGN0160FJZZ	R	Plug, 5-pin (K)	AD
P1501	QPLGZ1040CEZZ	R	Plug, 10-pin (XD)	AE
P1650	QPLGN0761CEZZ	R	Plug, 7-pin (H)	AD
P1702	QPLGN0304CEZZ	R	Plug, 3-pin (AC)	AB
P1750	QPLGZ1040CEZZ	R	Plug, 10-pin (XC)	AE
P1751	QPLGZ1040CEZZ	R	Plug, 10-pin (XB)	AE
SC1603	QTiPM0083CEZZ	R	Tip	AB
SG1680	QSPGH0025CEZZ	R	Spark Gap	AC
SG1681	QSPGH0025CEZZ	R	Spark Gap	AC
RDA1501	PRDAR0213PEFW	J	Heat Sink, for IC1501	AM
RDA1630	PRDAR0106PEFW	J	Heat Sink, for Q1630	AL
RDA1631	PRDAR0198PEFW	J	Heat Sink, for D1631	AG
RDA1671	PRDAR0277PEFW	J	Heat Sink, for Q1671	AF
RDA1680	PRDAR0135PEFW	J	Heat Sink, for Q1680	AE
RDA1700	PRDAR0139PEFW	J	Heat Sink, for D1700	AC
RDA1702	PRDAR0220PEFW	J	Heat Sink, for IC1702	AR
RDA1756	PRDAR0160PEFW	J	Heat Sink, for D1756	AF
	LHLDW1064PEKZ	J	Holder	AC
	LX-BZ0086TAFD	R	Screw	AA
	LX-BZ3049GEFD	R	Screw	AA
	LX-BZ3100CEFD	R	Screw	AA
	LX-TZ3004CEFD	R	Screw	AA

PWB-C DUNTK9848WEV1 CRT UNIT

INTEGRATED CIRCUITS

IC3801	VHiTDA6101Q-1	R	TDA6101Q	AH
IC3802	VHiTDA6101Q-1	R	TDA6101Q	AH
IC3803	VHiTDA6101Q-1	R	TDA6101Q	AH

TRANSISTORS

Q3801	VS2SA1246//1E	R	2SA1246	AE
Q3802	VS2SC3198-Y-1	R	2SC3198(Y)	AA
Q3851	VS2SC3198-Y-1	R	2SC3198(Y)	AA
Q3852	VS2SA1266-Y-1	R	2SA1266(Y)	AA
Q3853	VS2SA1837//-1	R	2SA1837	AF
Q3854	VS2SC4793//-1	R	2SC4793	AF

DIODES

D3801	RH-EX0647GEZZ	R	Zener Diode	AA
D3802	RH-EX0647GEZZ	R	Zener Diode	AA
D3803	RH-EX0647GEZZ	R	Zener Diode	AA
D3804	RH-DX0475CEZZ	R	Diode	AB

Ref. No.	Part No.	★	Description	Code
D3805	RH-EX0718GEZZ	R	Zener Diode	AB
D3851	RH-DX0475CEZZ	R	Diode	AB
D3852	RH-DX0475CEZZ	R	Diode	AB
D3853	RH-DX0475CEZZ	R	Diode	AB
D3854	RH-DX0443CEZZ	R	Diode	AC
D3855	RH-DX0443CEZZ	R	Diode	AC

CAPACITORS

C3802	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3803	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3804	RC-FZ0373CEZZ	R	0.033	250V	Mylar	AC
C3805	VCQYTA1HM472J	R	4700p	50V	Mylar	AB
C3806	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3807	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3808	RC-FZ0373CEZZ	R	0.033	250V	Mylar	AC
C3809	VCQYTA1HM472J	R	4700p	50V	Mylar	AB
C3810	RC-KZ0153CEZZ	R	1000p	3kV	Ceramic	AB
C3811	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C3812	VCEA0A1HW335M	R	3.3	50V	Electrolytic	AB
C3813	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3814	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3815	RC-FZ0373CEZZ	R	0.033	250V	Mylar	AC
C3816	VCQYTA1HM472J	R	4700p	50V	Mylar	AB
C3817	VCEA0A2EW106M	R	10	250V	Electrolytic	AD
C3818	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C3851	VCEA0A1EW476M	R	47	25V	Electrolytic	AB
C3852	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3853	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3854	VCKYPA2HB472K	R	4700p	500V	Ceramic	AB
C3855	VCKYPA2HB472K	R	4700p	500V	Ceramic	AB
C3856	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C3857	VCEA0A1EW476M	R	47	25V	Electrolytic	AB
C3858	VCEA0A2CW106M	R	10	160V	Electrolytic	AD
C3859	VCEA0A1EW476M	R	47	25V	Electrolytic	AB
C3860	VCEA0A2CW106M	R	10	160V	Electrolytic	AD
C3861	VCCSPA2HL560K	R	56p	500V	Ceramic	AA

RESISTORS

R3801	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R3802	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R3803	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R3804	VRS-VV3DB823J	R	82k	2W	Metal Oxide	AA
R3805	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R3806	VRD-RM2HD101J	R	100	1/2W	Carbon	AA
R3807	VRC-MA2HG152K	R	1.5k	1/2W	Solid	AA
R3810	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R3811	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R3812	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R3813	VRS-VV3DB823J	R	82k	2W	Metal Oxide	AA
R3814	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R3815	VRD-RM2HD101J	R	100	1/2W	Carbon	AA
R3816	VRC-MA2HG152K	R	1.5k	1/2W	Solid	AA
R3817	VRD-RA2BE182J	R	1.8k	1/8W	Carbon	AA
R3818	VRD-RA2BE153J	R	15k	1/8W	Carbon	AA
R3819	VRD-RA2BE392J	R	3.9k	1/8W	Carbon	AA
R3820	VRD-RA2BE154J	R	150k	1/8W	Carbon	AA
R3821	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R3822	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R3823	VRD-RA2BE272J	R	2.7k	1/8W	Carbon	AA
R3824	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R3825	VRS-VV3DB823J	R	82k	2W	Metal Oxide	AA
R3826	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R3827	VRD-RM2HD101J	R	100	1/2W	Carbon	AA
R3828	VRC-MA2HG152K	R	1.5k	1/2W	Solid	AA
R3829	VRD-RM2HD224J	R	220k	1/2W	Carbon	AA
R3830	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R3831	VRD-RA2BE223J	R	22k	1/8W	Carbon	AA
R3832	VRD-RA2EE680J	R	68	1/4W	Carbon	AA
R3851	VRD-RM2HD560J	R	56	1/2W	Carbon	AA
R3852	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R3853	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R3854	VRD-RA2BE100J	R	10	1/8W	Carbon	AA
R3855	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R3857	VRD-RA2BE820J	R	82	1/8W	Carbon	AA
R3858	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R3859	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R3860	VRD-RA2BE683J	R	68k	1/8W	Carbon	AA
R3861	VRD-RA2BE122J	R	1.2k	1/8W	Carbon	AA
R3862	VRD-RA2BE123J	R	12k	1/8W	Carbon	AA
R3863	VRS-VV3DB821J	R	820	2W	Metal Oxide	AA
R3864	VRD-RA2EE560J	R	56	1/4W	Carbon	AA
R3865	VRD-RA2EE560J	R	56	1/4W	Carbon	AA
R3866	VRD-RA2EE2R7J	R	2.7	1/4W	Carbon	AA
R3867	VRD-RA2EE2R7J	R	2.7	1/4W	Carbon	AA
R3868	VRS-VV3DB221J	R	220	2W	Metal Oxide	AA

MISCELLANEOUS PARTS

FB3851	RBLN-0047CEZZ	R	Ferrite Bead	AB
P3801	QPLGN0861CEZZ	R	Plug, 8-pin (KY)	AC
P3802	QPLGN0761CEZZ	R	Plug, 7-pin (H)	AD
P3851	QPLGN0261CEZZ	R	Plug, 2-pin (PU)	AB
⚠ SC3800	QSOCV0936CEZZ	R	CRT Socket	AM
SC3801	QTiPM0083CEZZ	R	Tip (L1)	AB
SC3803	QTiPM0083CEZZ	R	Tip (K857)	AB
SC3804	QTiPM0083CEZZ	R	Tip (L2)	AB
RDA3853	PRDAR0083PEFW	J	Heat Sink, for Q3853	AD
RDA3854	PRDAR0083PEFW	J	Heat Sink, for Q3854	AD
	LHLDW1067PEKZ	J	Holder	AC
	LX-BZ3100CEFD	R	Screw	AA
	LX-BZ3100CEFD	R	Screw	AA

PWB-D DUNTK9358WEV1 DIG. COM. UNIT

INTEGRATED CIRCUIT

IC5461	VHiTC9090AN-1	R	TC9090AN	BC

TRANSISTORS

Q5461	VS2SD601AR/-1	R	2SD601AR	AC
Q5462	VS2SB709AR/-1	R	2SB709AR	AC
Q5463	VS2SD601AR/-1	R	2SD601AR	AC
Q5464	VS2SD601AR/-1	R	2SD601AR	AC
Q5465	VS2SD601AR/-1	R	2SD601AR	AC
Q5466	VS2SB709AR/-1	R	2SB709AR	AC
Q5467	VS2SD601AR/-1	R	2SD601AR	AC
Q5861	VS2SD601AR/-1	R	2SD601AR	AC
Q5862	VS2SD601AR/-1	R	2SD601AR	AC
Q5863	VS2SB709AR/-1	R	2SB709AR	AC
Q5864	VS2SD601AR/-1	R	2SD601AR	AC

DIODES

D5461	RH-EX0619GEZZ	R	Zener Diode	AA
D5462	RH-EX0619GEZZ	R	Zener Diode	AA

COILS

L5461	VP-DF100K0000	R	Peaking 10µH	AB
L5462	VP-DF100K0000	R	Peaking 10µH	AB
L5463	VP-DF101K0000	R	Peaking 100µH	AB
L5464	VP-DF101K0000	R	Peaking 100µH	AB
L5465	VP-XF330K0000	R	Peaking 33µH	AB
L5466	VP-XF330K0000	R	Peaking 33µH	AB
L5467	VP-DF101K0000	R	Peaking 100µH	AB
L5468	VP-DF101K0000	R	Peaking 100µH	AB
L5469	VP-DF101K0000	R	Peaking 100µH	AB
L5471	VP-DF101K0000	R	Peaking 100µH	AB
L5472	VP-XF470K0000	R	Peaking 47µH	AB
L5473	VP-XF470K0000	R	Peaking 47µH	AB
L5862	VP-XF220K0000	R	Peaking 22µH	AB
L5863	VP-DF101K0000	R	Peaking 100µH	AB

CONTROL

R5467	RVR-M4619GEZZ	R	Video Level Adj.	AB

CAPACITORS

C5405	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5460	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC
C5461	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC

Ref. No.	Part No.	★			Description	Code
C5462	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5463	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C5464	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5465	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C5466	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C5467	VCCCCY1HH150J	R	15p	50V	Ceramic	AA
C5468	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5469	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5470	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5471	VCEA0A1HW474M	R	0.47	50V	Electrolytic	AB
C5472	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5473	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5474	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC
C5475	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5476	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5477	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5478	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC
C5479	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5480	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5481	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5482	VCCCCY1HH181J	R	180p	50V	Ceramic	AA
C5483	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5484	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5485	VCCCCY1HH121J	R	120p	50V	Ceramic	AA
C5486	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5487	VCEA0A0JW477M	R	470	6.3V	Electrolytic	AC
C5488	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5489	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C5490	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C5491	VCCCCY1HH220J	R	22p	50V	Ceramic	AA
C5492	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5493	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5494	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5861	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C5863	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C5864	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C5865	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C5866	VCCCCY1HH560J	R	56p	50V	Ceramic	AA

RESISTORS

RJ1	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ2	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ3	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R5461	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5462	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5463	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R5464	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R5465	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5466	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5468	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5469	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5470	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R5471	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R5472	VRS-CY1JF822J	R	8.2k	1/16W	Metal Oxide	AA
R5473	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R5474	VRD-RA2BE821J	R	820	1/8W	Carbon	AA
R5475	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5476	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5477	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R5478	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R5479	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5480	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5481	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R5482	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5483	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5484	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R5485	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA
R5486	VRS-CY1JF821J	R	820	1/16W	Metal Oxide	AA
R5861	VRD-RA2BE821J	R	820	1/8W	Carbon	AA
R5862	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5864	VRS-CY1JF123J	R	12k	1/16W	Metal Oxide	AA
R5865	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R5866	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5867	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R5868	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5869	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R5870	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

P5450	QPLGN0785CEZZ	R	Plug, 7-pin (YA)	AC
P5451	QPLGN0785CEZZ	R	Plug, 7-pin (YB)	AC
SLD5451	PSLDM0212PEFW	J	Shield	AE
SLD5452	PSLDM0213PEFW	J	Shield	AD

PWB-E DUNTKA049WEV0 CONTROL UNIT

INTEGRATED CIRCUIT

IC1351	VHiAN7108//-1	R	AN7108	AL

TRANSISTORS

Q1200	VS2SA1015G/1E	R	2SA1015G	AC
Q1201	VS2SC1815GW-1	R	2SC1815GW	AB
Q1202	VS2SC1815GW-1	R	2SC1815GW	AB
Q1203	VS2SC1815GW-1	R	2SC1815GW	AB
Q1204	VS2SC1815GW-1	R	2SC1815GW	AB

DIODES

D1200	RH-PX0274CEZZ	R	LED, SAVE	AC
D1201	RH-PX0274CEZZ	R	LED, ON TIMER	AC
D1202	RH-PX0414CEZZ	R	LED, POWER ON/OFF	AE
D1203	RH-EX0631GEZZ	R	Zener Diode	AA
D1204	RH-EX0631GEZZ	R	Zener Diode	AA

CAPACITORS

C1200	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C1201	VCKYPA1HB102K	R	1000p	50V	Ceramic	AA
C1202	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1203	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C1204	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1205	VCEA0A0JW107M	R	100	6.3V	Electrolytic	AB
C1209	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1210	VCKYPA1HB221K	R	220p	50V	Ceramic	AA
C1211	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1212	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1351	VCFYFA1HA154J	R	0.15	50V	Mylar	AC
C1352	VCFYFA1HA154J	R	0.15	50V	Mylar	AC
C1353	VCKYPA1HB682K	R	6800p	50V	Ceramic	AA
C1354	VCKYPA1HB682K	R	6800p	50V	Ceramic	AA
C1355	VCEA0A1AW107M	R	100	10V	Electrolytic	AB
C1356	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C1357	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C1358	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C1359	VCEA0A0JW337M	R	330	6.3V	Electrolytic	AC
C1360	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C1361	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C1362	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C1363	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1364	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA
C1365	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA

RESISTORS

R1201	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1202	VRD-RA2BE822J	R	8.2k	1/8W	Carbon	AA
R1203	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1204	VRD-RA2BE222J	R	2.2k	1/8W	Carbon	AA
R1206	VRD-RA2BE273J	R	27k	1/8W	Carbon	AA
R1207	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1208	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1209	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1210	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R1212	VRD-RA2BE102J	R	1.0k	1/8W	Carbon	AA
R1213	VRD-RA2EE750J	R	75	1/4W	Carbon	AA
R1214	VRD-RA2BE101J	R	100	1/8W	Carbon	AB
R1215	VRD-RA2BE152J	R	1.5k	1/8W	Carbon	AA
R1216	VRD-RA2BE472J	R	4.7k	1/8W	Carbon	AA
R1217	VRD-RA2BE103J	R	10k	1/8W	Carbon	AA

Ref. No.	Part No.	★	Description	Code
R1218	VRD-RA2BE152J	R	1.5k 1/8W Carbon	AA
R1219	VRD-RA2BE472J	R	4.7k 1/8W Carbon	AA
R1220	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1221	VRD-RA2BE472J	R	4.7k 1/8W Carbon	AA
R1222	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1223	VRD-RA2BE122J	R	1.2k 1/8W Carbon	AA
R1224	VRD-RA2BE471J	R	470 1/8W Carbon	AA
R1225	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1226	VRD-RA2BE472J	R	4.7k 1/8W Carbon	AA
R1227	VRD-RM2HD101J	R	100 1/2W Carbon	AA
R1228	VRD-RA2BE101J	R	100 1/8W Carbon	AB
R1229	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1351	VRD-RA2BE474J	R	470k 1/8W Carbon	AA
R1352	VRD-RA2BE474J	R	470k 1/8W Carbon	AA
R1353	VRD-RA2BE123J	R	12k 1/8W Carbon	AA
R1354	VRD-RA2BE123J	R	12k 1/8W Carbon	AA
R1355	VRD-RA2BE123J	R	12k 1/8W Carbon	AA
R1356	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1357	VRD-RA2BE223J	R	22k 1/8W Carbon	AA
R1358	VRD-RA2BE123J	R	12k 1/8W Carbon	AA
R1361	VRD-RA2BE103J	R	10k 1/8W Carbon	AA
R1363	VRD-RA2BE121J	R	120 1/8W Carbon	AA
R1364	VRD-RA2BE121J	R	120 1/8W Carbon	AA
R1365	VRD-RA2BE392J	R	3.9k 1/8W Carbon	AA
R1366	VRD-RA2BE121J	R	120 1/8W Carbon	AA
R1367	VRD-RA2BE392J	R	3.9k 1/8W Carbon	AA
R1368	VRD-RA2BE121J	R	120 1/8W Carbon	AA

SWITCHES

S1200	QSW-K0079GEZZ	R	CH-Up	AB
S1201	QSW-K0079GEZZ	R	CH-Down	AB
S1202	QSW-K0079GEZZ	R	VOL-Up	AB
S1203	QSW-K0079GEZZ	R	VOL-Down	AB
S1204	QSW-K0079GEZZ	R	Preset/Menu	AB
⚠ S1205	QSW-P0588CEZZ	R	AC Switch	AP

MISCELLANEOUS PARTS

J1200	QJAKJ0047CEZZ	R	Jack, Headphone	AD
J1201	QJAKZ0101PEZZ	J	Jack, AV-3 In	AN
P1201	QPLGN0161FJZZ	R	Plug, 6-pin (AB)	
P1202	QPLGN0861CEZZ	R	Plug, 8-pin (Y)	AC
P1203	QPLGN0761CEZZ	R	Plug, 7-pin (LE)	AD
P1204	QPLGN1061CEZZ	R	Plug, 10-pin (HP)	AC
RMC1200	RRMCU0235CEZZ	R	R/C Receiver	AK
SLD1351	PSLDM0237PEFW	J	Shield	AD
	LHLDP1056PE00	J	Holder	AC

PWB-H DUNTKA048WEV1 SUB POWER UNIT

INTEGRATED CIRCUITS

IC2700	VHiMiP0253/-1	R	MIP0253SP	AM
⚠ IC2701	RH-FX0008GEZZ	R	PC123FY8	AE
IC2750	VHiSi3051N/-1	R	SI3051N	AL

TRANSISTORS

Q2750	VS2SC1815GW-1	R	2SC1815GW	AB
Q2751	VS2SC1959Y/1E	R	2SC1959(Y)	AC

DIODES

D2700	RH-DX0083GEZZ	R	Diode	AC
D2750	RH-DX0407CEZZ	R	Diode	AD
D2751	RH-DX0475CEZZ	R	Diode	AB
D2752	RH-EX1329CEZZ	R	Zener Diode	AD
D2754	RH-DX0475CEZZ	R	Diode	AB
⚠ VA2700	RH-VX0048CEZZ	R	Varistor	AE

PACKAGED CIRCUIT

PR2700	RMPTP0085CEZZ	R	Packaged Circuit	AL

COILS AND TRANSFORMER

⚠ L2700	RCiLF0138CEZZ	R	Coil	AQ
⚠ L2701	RCiLF0138CEZZ	R	Coil	AQ
⚠ L2702	RCiLF0138CEZZ	R	Coil	AQ
⚠ T2700	RTRNZ0159PEZZ	J	Transformer	AK

CAPACITORS

⚠ C2700	RC-FZ016SGEZZ	R	0.47	AC250V		AK
C2701	VCFYSB2EB224K	R	0.22	250V	Mylar	AD
C2703	RC-KZ0029CEZZ	R	0.01	AC250V	Ceramic	AC
C2705	VCEA0A2GW475M	R	4.7	400V	Electrolytic	AE
C2706	RC-KZ1022CEZZ	R	47p	1kV	Ceramic	AC
C2707	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
⚠ C2708	RC-FZ016SGEZZ	R	0.047	AC250V		AK
C2709	RC-KZ018SCEZZ	R	1000p	4kV	Ceramic	AD
C2750	VCKYPA2HB221K	R	220p	500V	Ceramic	AA
C2751	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C2752	VCEA0A1AW227M	R	220	10V	Electrolytic	AB
C2753	VCKYPA1HF103Z	R	0.01	50V	Ceramic	AA

RESISTORS

⚠ R2700	VRC-UA2HG275K	R	2.7M	1/2W	Solid	AA
R2701	VRD-RM2HD391J	R	390	1/2W	Carbon	AA
R2702	VRW-KP3HC100J	R	10	5W	Cement	AD
R2750	VRD-RA2BE562J	R	5.6k	1/8W	Carbon	AA
R2751	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

⚠ RY2700	RRLYJ0087CEZZ	R	Relay	AM
⚠ F2700	QFS-C5022CEZZ	R	Fuse T5A 250V	AD
FB2700	RBLN-0037CEZZ	R	Ferrite Bead	AB
FB2750	RBLN-0037CEZZ	R	Ferrite Bead	AB
FH2700	QFSHD1013CEZZ	R	Fuse Holder	AC
FH2701	QFSHD1014CEZZ	R	Fuse Holder	AC
P2700	QPLGN0269GEZZ	R	Plug, 2-pin (AA)	AB
P2701	QPLGN0505CEZZ	R	Plug, 5-pin (AB)	AB
P2702	QPLGN0207CEZZ	R	Plug, 2-pin (G)	AA
P2703	QPLGN0304CEZZ	R	Plug, 3-pin (AC)	AB
P2750	QPLGN0361CEZZ	R	Plug, 3-pin (XA)	AB
	LHLDW1037PEZZ	J	Holder	AB

PWB-I DUNTK9863WEV4 NICAM UNIT

INTEGRATED CIRCUITS

IC2300	VHiMSP3410D-1	R	MSP3410D	BK
IC2301	VHiTDA9808T-1	R	TDA9808T	AR
IC2302	VHiAN7397K/-1	R	AN7397K	AX
IC2770	RH-iX3232CEZZ	R	SSE96G	AV
IC2771	VHiBA15218F-1	R	BA15218F	AD

TRANSISTORS

Q2300	VS2SC2735//1E	R	2SC2735	AC
Q2301	VS2SD601AR/-1	R	2SD601AR	AC
Q2302	VS2SC2735//1E	R	2SC2735	AC
Q2770	VS2SD601AR/-1	R	2SD601AR	AC
Q2771	VS2SD601AR/-1	R	2SD601AR	AC
Q2772	VS2SD601AR/-1	R	2SD601AR	AC
Q2773	VS2SD601AR/-1	R	2SD601AR	AC
Q2774	VS2SD601AR/-1	R	2SD601AR	AC
Q2775	VS2SD601AR/-1	R	2SD601AR	AC
Q2776	VS2SD601AR/-1	R	2SD601AR	AC

DIODES

D2300	RH-EX1222CEZZ	R	Zener Diode	AE
D2301	RH-EX1222CEZZ	R	Zener Diode	AE
D2302	RH-DX0475CEZZ	R	Diode	AB
D2303	RH-DX0475CEZZ	R	Diode	AB

PACKAGED CIRCUIT

X2301	RCRSB0249GEZZ	R	Crystal	AF

COILS AND TRANSFORMER

L2300	VP-DF120K0000	R	Peaking 12µH	AB

Ref. No.	Part No.	★	Description	Code
L2301	VP-DF120K0000	R	Peaking 12µH	AB
L2302	VP-DF120K0000	R	Peaking 12µH	AB
L2303	VP-XF220K0000	R	Peaking 22µH	AB
L2304	VP-XF1R2K0000	R	Peaking 1.2µH	AB
SF2300	RFiLC0016PEZZ	J	SAW Filter	AS
T2300	RCiLD0231CEZZ	R	Detection Coil	AF

CAPACITORS

C2300	VCCCCY1HH1R5C	R	1.5p	50V	Ceramic	AD
C2301	VCCCCY1HH1R5C	R	1.5p	50V	Ceramic	AD
C2302	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C2303	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C2305	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C2306	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2307	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C2308	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2309	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2310	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2311	VCKYCY1CF334Z	R	0.33	16V	Ceramic	AA
C2312	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2313	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C2314	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C2315	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2316	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2317	VCEA0A1HW335M	R	3.3	50V	Electrolytic	AB
C2318	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2319	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2320	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2321	VCEA0A1CW227M	R	220	16V	Electrolytic	AC
C2322	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2323	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C2324	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C2325	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2326	VCCCCY1HH151J	R	150p	50V	Ceramic	AA
C2327	VCEA0A1AW477M	R	470	10V	Electrolytic	AC
C2328	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2329	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2330	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2331	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2334	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2335	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2336	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2337	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C2338	VCCCCY1HH330J	R	33p	50V	Ceramic	AA
C2339	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2341	VCEA0A1HW104M	R	0.1	50V	Electrolytic	AB
C2342	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C2343	VCE9GA1HW105M	R	1.0	50V	Elect. (N.P)	AB
C2344	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2345	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2346	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2347	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2348	VCFYFA1HA124J	R	0.12	50V	Mylar	AC
C2349	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2350	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2351	VCEA0A1CW226M	R	22	16V	Electrolytic	AB
C2352	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2353	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2354	VCKYCY1EF104Z	R	0.1	25V	Ceramic	AA
C2355	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2356	VCE9GA1CW226M	R	22	16V	Elect. (N.P)	AB
C2357	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2358	VCEA0A1CW336M	R	33	16V	Electrolytic	AB
C2359	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C2360	VCQYTA1HM473J	R	0.047	50V	Mylar	AA
C2370	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2371	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2372	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2373	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2374	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2375	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2376	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2377	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2379	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2380	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2770	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2771	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2772	VCKYCY1HB152K	R	1500p	50V	Ceramic	AA
C2773	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C2774	VCKYCY1HB152K	R	1500p	50V	Ceramic	AA
C2775	VCKYCY1EB103K	R	0.01	25V	Ceramic	AA
C2776	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2777	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2778	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C2779	VCEA0A1CW337M	R	330	16V	Electrolytic	AC
C2780	VCCCCY1HH560J	R	56p	50V	Ceramic	AA
C2787	VCEA0A1HW224M	R	0.22	50V	Electrolytic	AB

RESISTORS

RJ71	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ72	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ73	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ74	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ75	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ76	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ77	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ78	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R2301	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
⚠ R2302	RR-XZ0029CEZZ	R	3.3	1/2W	Fuse Resistor	AB
R2303	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2304	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2305	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R2306	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2307	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2308	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R2309	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2310	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R2311	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2312	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R2313	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R2314	VRS-CY1JF393J	R	39k	1/16W	Metal Oxide	AA
R2315	VRS-CY1JF183J	R	18k	1/16W	Metal Oxide	AA
R2316	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2317	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2318	VRS-CY1JF181J	R	180	1/16W	Metal Oxide	AA
R2319	VRS-CY1JF183J	R	18k	1/16W	Metal Oxide	AA
R2320	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2321	VRS-CY1JF823J	R	82k	1/16W	Metal Oxide	AA
R2322	VRS-CY1JF823J	R	82k	1/16W	Metal Oxide	AA
R2323	VRS-CY1JF225J	R	2.2M	1/16W	Metal Oxide	AA
R2324	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2325	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2326	VRS-CY1JF122J	R	1.2k	1/16W	Metal Oxide	AA
R2327	VRS-CY1JF392J	R	3.9k	1/16W	Metal Oxide	AA
R2328	VRD-RA2BE151J	R	150	1/8W	Carbon	AA
R2332	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2333	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2350	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2351	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2352	VRS-CY1JF154J	R	150k	1/16W	Metal Oxide	AA
R2768	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2769	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
⚠ R2770	RR-XZ0029CEZZ	R	3.3	1/2W	Fuse Resistor	AB
R2771	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2772	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R2773	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2774	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2775	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2776	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2777	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2778	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2779	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R2780	VRS-CY1JF563J	R	56k	1/16W	Metal Oxide	AA
R2781	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2782	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2783	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2784	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2785	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R2786	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2787	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description			Code
R2788	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2789	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2790	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2791	VRS-CY1JF333J	R	33k	1/16W	Metal Oxide	AA
R2792	VRS-CY1JF472J	R	4.7k	1/16W	Metal Oxide	AA
R2793	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2794	VRD-RM2HD561J	R	560	1/2W	Carbon	AA
R2795	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R2796	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R2797	VRS-CY1JF272J	R	2.7k	1/16W	Metal Oxide	AA
R2798	VRS-CY1JF332J	R	3.3k	1/16W	Metal Oxide	AA
R2799	VRD-RM2HD561J	R	560	1/2W	Carbon	AA

MISCELLANEOUS PARTS

P2300	QPLGN0274FJZZ	R	Plug, 20-pin (NI)	AE
SLD2301	PSLDM0281PEFW	J	Shield	AD
SLD2302	PSLDM0282PEFW	J	Shield	AD
TP2300	QLUGP0102PEZZ	J	Lug, Test Point	AA

PWB-J DUNTK9861WEV8 VCJ UNIT

INTEGRATED CIRCUITS

IC2401	VHiTA78L09S-1	R	TA78L09S	AC
IC2801	RH-iX3323CEZZ	R	TA1298BN	BB
IC2806	VHiTA8772AN-1	R	TA8772AN	AV
IC2807	VHiM52055FP-1	R	M52055FP	AH
IC2901	VHiTA1229N/-1	R	TA1229N	AX

TRANSISTORS

Q2402	VS2SB709AR/-1	R	2SB709AR	AC
Q2404	VS2SD601AR/-1	R	2SD601AR	AC
Q2405	VS2SB709AR/-1	R	2SB709AR	AC
Q2406	VS2SD601AR/-1	R	2SD601AR	AC
Q2407	VS2SD601AR/-1	R	2SD601AR	AC
Q2408	VS2SD601AR/-1	R	2SD601AR	AC
Q2409	VS2SD601AR/-1	R	2SD601AR	AC
Q2410	VS2SD601AR/-1	R	2SD601AR	AC
Q2411	VS2SD601AR/-1	R	2SD601AR	AC
Q2601	VS2SD601AR/-1	R	2SD601AR	AC
Q2801	VS2SD601AR/-1	R	2SD601AR	AC

DIODES

D2403	RH-DX0475CEZZ	R	Diode	AB
D2405	RH-DX0475CEZZ	R	Diode	AB
D2406	RH-EX0619GEZZ	R	Zener Diode	AA
D2407	RH-EX0619GEZZ	R	Zener Diode	AA
D2408	RH-EX0619GEZZ	R	Zener Diode	AA
D2409	RH-DX0475CEZZ	R	Diode	AB
D2410	RH-DX0475CEZZ	R	Diode	AB
D2411	RH-EX0260TAZZ	R	Zener Diode	AC
D2412	RH-EX0260TAZZ	R	Zener Diode	AC

PACKAGED CIRCUIT

X2401	RCRSB0278CEZZ	R	Crystal, 4.43MHz	AG
X2402	RCRSB0277CEZZ	R	Crystal, 3.58MHz	AG
X2901	RCRSB0004PEZZ	J	Crystal, 4MHz	AH

FILTER AND COILS

CF2401	RFiLA0034CEZZ	R	Ceramic Filter	AD
L2401	VP-DF4R7K0000	R	Peaking 4.7µH	AB
L2402	VP-DF4R7K0000	R	Peaking 4.7µH	AB
L2403	VP-DF4R7K0000	R	Peaking 4.7µH	AB
L2404	VP-DF101K0000	R	Peaking 100µH	AB
L2405	VP-XF270K0000	R	Peaking 27µH	AB
L2406	VP-XF180K0000	R	Peaking 18µH	AB
L2901	VP-XF120K0000	R	Peaking 12µH	AB

CAPACITORS

C2401	VCCCCY1HH120J	R	12p	50V	Ceramic	AA
C2402	VCCCCY1HH120J	R	12p	50V	Ceramic	AA
C2403	VCQYTA1HM222J	R	2200p	50V	Mylar	AA
C2404	VCEA0A1HW224M	R	0.22	50V	Electrolytic	AB
C2405	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C2406	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2407	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2409	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C2410	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2411	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2412	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C2413	VCKYCY1EB103K	R	0.01	25V	Ceramic	AA
C2414	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2415	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2419	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2420	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2421	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2422	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2423	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C2424	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C2425	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C2426	VCCCCY1HH470J	R	47p	50V	Ceramic	AA
C2427	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2428	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2429	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2430	VCEA0A1CW107M	R	100	16V	Electrolytic	AC
C2431	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2432	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2433	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2441	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2442	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2445	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C2446	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2450	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2451	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2452	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2454	VCKYCY1EB822K	R	8200p	25V	Ceramic	AA
C2455	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2456	VCKYCY1HB561K	R	560p	50V	Ceramic	AA
C2457	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2458	VCFYFA1HA334J	R	0.33	50V	Mylar	AB
C2459	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C2460	VCCCCY1HH820J	R	82p	50V	Ceramic	AA
C2801	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2802	VCEA0A1HW474M	R	0.47	50V	Electrolytic	AB
C2803	VCEA0A1HW474M	R	0.47	50V	Electrolytic	AB
C2804	VCEA0A1CW477M	R	470	16V	Electrolytic	AC
C2805	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2806	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2807	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2808	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2809	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2810	VCEA0A1HW474M	R	0.47	50V	Electrolytic	AB
C2811	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2812	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2813	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2814	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2815	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2816	VCKYCY1CF334Z	R	0.33	16V	Ceramic	AA
C2817	VCKYCY1CF334Z	R	0.33	16V	Ceramic	AA
C2818	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2819	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2820	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2821	VCKYCY1CF334Z	R	0.33	16V	Ceramic	AA
C2822	VCKYCY1CF334Z	R	0.33	16V	Ceramic	AA
C2833	VCFYFA1HA684J	R	0.68	50V	Mylar	AD
C2834	VCFYFA1HA684J	R	0.68	50V	Mylar	AD
C2835	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2836	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2837	VCKYCY1CB104K	R	0.1	16V	Ceramic	AB
C2838	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2839	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2841	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2842	VCQYTA1HM104J	R	0.1	50V	Mylar	AA
C2843	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2844	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2848	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2849	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB

Ref. No.	Part No.	★			Description	Code
C2850	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2851	VCEA0A1HW105M	R	1.0	50V	Electrolytic	AB
C2852	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2853	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2854	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2855	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2867	VCEA0A1HW475M	R	4.7	50V	Electrolytic	AB
C2901	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2902	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C2903	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2904	VCQYTA1HM683J	R	0.068	50V	Mylar	AB
C2905	VCEA0A1HW225M	R	2.2	50V	Electrolytic	AB
C2906	VCQYTA1HM223J	R	0.022	50V	Mylar	AA
C2907	VCQYTA1HM563J	R	0.056	50V	Mylar	AB
C2908	VCEA0A1CW106M	R	10	16V	Electrolytic	AB
C2909	VCCCCY1HH820J	R	82p	50V	Ceramic	AA
C2910	VCKYCY1HB102K	R	1000p	50V	Ceramic	AA
C2911	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2912	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2913	VCCCCY1HH101J	R	100p	50V	Ceramic	AA
C2914	VCKYCY1HF103Z	R	0.01	50V	Ceramic	AA
C2915	VCEA0A1CW476M	R	47	16V	Electrolytic	AB
C2916	VCCCCY1HH150J	R	15p	50V	Ceramic	AA

RESISTORS

RJ1	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ2	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ3	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ4	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ7	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ8	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ9	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ11	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ12	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ14	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ15	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ16	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ17	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ18	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ19	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ20	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ21	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ22	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ23	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ24	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ26	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
RJ27	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R2401	VRD-RA2BE332J	R	3.3k	1/8W	Carbon	AA
R2402	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2403	VRS-CY1JF271J	R	270	1/16W	Metal Oxide	AA
R2405	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2406	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R2407	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2410	VRS-CY1JF000J	R	0	1/16W	Metal Oxide	AA
R2414	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2415	VRD-RA2BE333J	R	33k	1/8W	Carbon	AA
R2416	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R2417	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R2418	VRD-RA2BE221J	R	220	1/8W	Carbon	AA
R2419	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R2420	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R2421	VRS-CY1JF221J	R	220	1/16W	Metal Oxide	AA
R2422	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2423	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2424	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2426	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2427	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2429	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2433	VRS-CY1JF152J	R	1.5k	1/16W	Metal Oxide	AA
R2436	VRS-CY1JF681J	R	680	1/16W	Metal Oxide	AA
R2439	VRS-CY1JF562J	R	5.6k	1/16W	Metal Oxide	AA
R2444	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R2445	VRS-CY1JF391J	R	390	1/16W	Metal Oxide	AA
R2446	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2448	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2452	VRS-CY1JF271J	R	270	1/16W	Metal Oxide	AA
R2455	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2456	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2457	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2458	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2459	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R2460	VRS-CY1JF393J	R	39k	1/16W	Metal Oxide	AA
R2462	VRS-CY1JF151J	R	150	1/16W	Metal Oxide	AA
R2463	VRS-CY1JF273J	R	27k	1/16W	Metal Oxide	AA
R2464	VRS-CY1JF393J	R	39k	1/16W	Metal Oxide	AA
R2465	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2466	VRS-CY1JF182J	R	1.8k	1/16W	Metal Oxide	AA
R2467	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2468	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2469	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R2470	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R2471	VRS-CY1JF473J	R	47k	1/16W	Metal Oxide	AA
R2503	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2601	VRS-CY1JF153J	R	15k	1/16W	Metal Oxide	AA
R2602	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2603	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2604	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2801	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2802	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2803	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2804	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2824	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2825	VRD-RA2BE391J	R	390	1/8W	Carbon	AA
R2826	VRS-CY1JF222J	R	2.2k	1/16W	Metal Oxide	AA
R2827	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2828	VRS-CY1JF471J	R	470	1/16W	Metal Oxide	AA
R2829	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2830	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2831	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2836	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2838	VRS-CY1JF100J	R	10	1/16W	Metal Oxide	AA
R2839	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2866	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2867	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2901	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2902	VRS-CY1JF561J	R	560	1/16W	Metal Oxide	AA
R2903	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2904	VRS-CY1JF475J	R	4.7M	1/16W	Metal Oxide	AA
R2905	VRS-CY1JF102J	R	1.0k	1/16W	Metal Oxide	AA
R2906	VRS-CY1JF103J	R	10k	1/16W	Metal Oxide	AA
R2907	VRS-CY1JF223J	R	22k	1/16W	Metal Oxide	AA
R2908	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA
R2909	VRS-CY1JF101J	R	100	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

P2401	QPLGZ3061CEZZ	R	Plug, 30-pin (VA)	AK
P2402	QPLGN0275FJZZ	R	Plug, 25-pin (VB)	AF
P2404	QPLGN0861CEZZ	R	Plug, 8-pin (KY)	AC
SLD2401	PSLDM0277PEFW	J	Shield	AE
SLD2402	PSLDM0278PEFW	J	Shield	AE
TP2803	QLUGP0102PEZZ	J	Lug, Test Point	AA
TP2804	QLUGP0102PEZZ	J	Lug, Test Point	AA
TP2805	QLUGP0102PEZZ	J	Lug, Test Point	AA
TP2901	QLUGP0102PEZZ	J	Lug, Test Point	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠	QACCL3025CESA	R	AC Cord	AR
	CSP-Z0108CE04	R	Speaker Box, x2	
	VSP1208PB316S	R	Speaker, x2	
	QCNW-1885PEZZ	J	Connecting Cord	AG
	QCNW-2314PEZZ	J	Connecting Cord	AE
	QCNW-2316PEZZ	J	Connecting Cord	AF
	QCNW-2317PEZZ	J	Connecting Cord	AF
	QCNW-2318PEZZ	J	Connecting Cord	AK
	QCNW-2320PEZZ	J	Connecting Cord	AG
	QCNW-2389PEZZ	J	Connecting Cord	
	QCNW-2390PEZZ	J	Connecting Cord	
	QCNW-2391PEZZ	J	Connecting Cord	
	QCNW-2392PEZZ	J	Connecting Cord	
	QCNW-2395PEZZ	J	Connecting Cord	
	LHLDK0002PEK0	J	Holder	AA
	LHLDT0006PEK0	J	Holder	AE
	LHLDZ0063PEZZ	J	Holder	AD

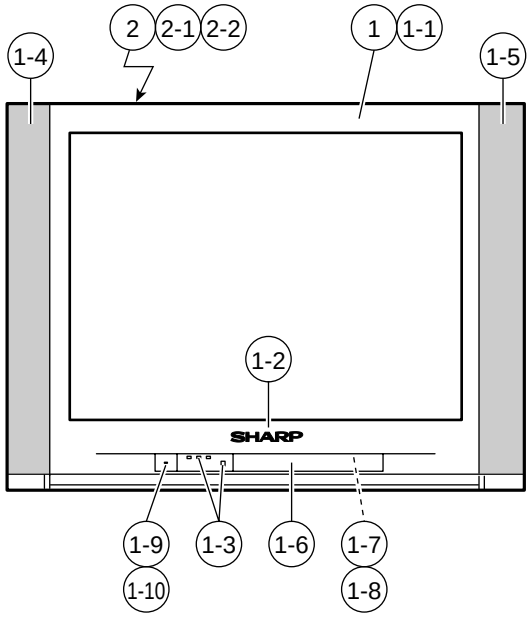
SUPPLIED ACCESSORIES

	TGAN-0068PEZZ	J	Guarantee Card	AE
	TiNS-6841PEZZ	J	Operation Manual	
	TCAUA0002PEZZ	J	Caution Card	AB
	RRMCG1497PESA	J	Infrared R/C Unit	AU

PACKING PARTS
(NOT REPLACEMENT ITEM)

	SPAKC6559PEZZ	–	Packing Case	—
	SPAKP0146PEZZ	–	Wrapping Paper	—
	SPAKX2726PEZZ	–	Buffer Material	—
	SSAKA0002PEZZ	–	Polyethylene Bag	—

CABINET PARTS

Ref. No.	Part No.	★	Description	Code
1	CCABA2517WEV0	R	Front Cabinet Ass'y	
1-1	*Not Available*	–	Front Cabinet	—
1-2	HBDGB3141CESA	R	Badge, "SHARP"	AG
1-3	HDECQ0134PESA	J	LED Decoration, R/C Cover	AD
1-4	HDECQ0140PESB	J	Speaker Net (L)	
1-5	HDECQ0141PESB	J	Speaker Net (R)	
1-6	GDORF0182PESA	J	Door	
1-7	PKAi-0007PE00	J	Door Latch	AE
1-8	HiNDP0251PEZZ	J	Indication Plate, In Door	
1-9	JBTN-0326PESA	J	Power Button	
1-10	MSPRC0005PEFW	J	Spring, Power Button	AB
2	CCABB2410WEV0	R	Rear Cabinet Ass'y	
2-1	*Not Available*	–	Rear Cabinet	—
2-2	HiNDP0253PEZZ	J	Indication Plate	

CABINET PARTS LOCATION